

**DECLARATION OF CONFORMITY
MICROBIOLOGY PRODUCTS**

- 1) Manufacturer (Name, department): HiMedia Laboratories Pvt. Ltd.
Address: Plot No. C-40, Road No. 21/Y, MIDC, Wagle Industrial Area, Thane(West)-400604, Maharashtra, India
- and
- 2) European authorized representative: CEpartner4U BV,
Address: ESDOORNLAAN 13, 3951DB MAARN, THE NETHERLANDS;
(on product labels printed as:
CEpartner4U , ESDOORNLAAN 13, 3951DB MAARN, THE NETHERLANDS. www.cepartner4u.eu)

3) Product(s) (groupnames /.):

Group	Group name	NL registration no.	No.
DCM&S	Dehydrated Culture Media & Supplements	NL-CA002-2013-26442	1
RPM	Ready Prepared Media Subgroups: Ready Prepared Plates, Ready Prepared Liquid & Solid Medium, Ready Prepared Slants, Ready Prepared Dual Media, HiDip Slides, HiSafe Blood Culturing System, Transport Medium w/ swabs, Viral Transport Medium w/ swabs, L.J. Medium Slants & Kits, Biochemical Kits for Mycobacteria, UTI Diagnostic Kits, Biochemical Identification Kits	NL-CA002-2013-26448	2
ESK	Epidemiological Screening Kit: Subgroups: Hi Aureus Confirmation Kits	NL-CA002-2012-24117	3
ASS	Antimicrobial Susceptibility Systems Subgroups: Sensitivity Discs-Single & Multi Discs MIC Strips: HiComb Strips, HiComb™ MIC Strip, Modified & Ezy MIC Strips, HiMIC™ Plate Kit	NL-CA002-2013-26444	4
BDA	Bacteriological Differentiation Aids Subgroups: Readymade Stains, Indicators & Reagents in liquid, Differentiation Discs & Strips, HiDtect Rapid Identification Discs	NL-CA002-2013-26445	5

type and model numbers: see appendix

4) The product(s) described above is in conformity with:

Title	Document No.
In vitro Diagnostic Medical Devices Directive	98/79/EC

5) Additional information (Conformity procedure, Notified Body, CE certificate, Registration nr., etc.):

Conformity assessment procedure for CE marking: In vitro Diagnostic Medical Device Directive, Annex III

Mumbai, India; 2022-03-01

(Place & date of issue (yyyy-mm-dd))

Dr. G.M. Warke, Managing Director

(name; function and signature of manufacturer)

Appendix

Date: 2022-03-01

List of devices:

Product group	Type/ Model / Ref number	Device Name	Risk Class	Date of CE compliance
Dehydrated Culture Media				
DCM	M1739	A7 Agar Base (Shepard's Differential Agar Base)	Low risk	20/12/2012
DCM	MCD884	Aeromonas Isolation HiCynth™ Medium Base	Low risk	12/08/2015
DCM	MV884	Aeromonas Isolation HiVeg™ Medium Base	Low risk	20/12/2012
DCM	M884	Aeromonas Isolation Medium Base	Low risk	20/12/2012
DCM	M1284	Aeromonas Starch DNA Agar Base	Low risk	20/12/2012
DCM	M016B	Agar Medium L (Brilliant Green, Phenol Red, Lactose Monohydrate, Sucrose Agar)	Low risk	20/12/2012
DCM	ME016	Agar Medium L (Brilliant Green, Phenol Red, Lactose Monohydrate, Sucrose Agar)	Low risk	20/12/2012
DCM	MCD618	Alkaline HiCynth™ Peptone Water	Low risk	12/08/2015
DCM	MV618	Alkaline HiVeg™ Peptone Water	Low risk	20/12/2012
DCM	M618	Alkaline Peptone Water	Low risk	20/12/2012
DCM	M1887	Alkaline Saline Peptone Water (ASPW)	Low risk	10/11/2020
DCM	M651	Amies Transport Medium w/ Charcoal	Low risk	20/12/2012
DCM	M684A	Amies Transport Medium, Liquid w/o charcoal	Low risk	25/08/2016
DCM	M228	Anaerobic Agar	Low risk	20/12/2012
DCM	M491	Anaerobic Agar (Brewer)	Low risk	20/12/2012
DCM	M230	Anaerobic Agar w/o Dextrose	Low risk	20/12/2012
DCM	M229	Anaerobic Agar w/o Dextrose and Eh Indicator	Low risk	20/12/2012
DCM	M1635	Anaerobic Basal Agar	Low risk	20/12/2012
DCM	M1636	Anaerobic Basal Broth	Low risk	20/12/2012
DCM	M1345	Anaerobic Blood Agar Base	Low risk	20/12/2012
DCM	M975A	Anaerobic Blood Agar Base	Low risk	20/12/2012
DCM	M1034	Anaerobic CNA Agar Base	Low risk	20/12/2012
DCM	MV228	Anaerobic HiVeg™ Agar	Low risk	20/12/2012
DCM	MV491	Anaerobic HiVeg™ Agar (Brewer)	Low risk	20/12/2012
DCM	MV230	Anaerobic HiVeg™ Agar w/o Dextrose	Low risk	20/12/2012
DCM	MV229	Anaerobic HiVeg™ Agar w/o Dextrose and Eh Indicator	Low risk	20/12/2012
DCM	MV909	Andrade Peptone Water w/ HiVeg™ Extract No. 1	Low risk	20/12/2012
DCM	M909	Andrade Peptone Water w/ HM Extract	Low risk	20/12/2012
DCM	M1485	Antibiotic Sulphonamide Sensitivity Test Agar (ASS Agar)	Low risk	20/12/2012
DCM	M1576	Arabinose Agar Base	Low risk	30/10/2018
DCM	M1637	Arcobacter Broth Base	Low risk	10/11/2020
DCM	M1894	Arcobacter Selective Broth Base	Low risk	10/11/2020

DCM	M672	Asparagine Broth (Coccidioidin and Histoplasmin Broth)	Low risk	20/12/2012
DCM	M158	Azide Blood Agar Base	Low risk	20/12/2012
DCM	MV158	Azide Blood Agar Base, HiVeg™	Low risk	20/12/2012
DCM	M1271	Azide Dextrose Broth w/ BCP	Low risk	10/11/2020
DCM	M220	B.A.G.G. Broth Base (Buffered Azide Glucose Glycerol Broth Base)	Low risk	20/12/2012
DCM	MV220	B.A.G.G. HiVeg™ Broth Base (Buffered Azide Glucose Glycerol HiVeg™ Broth Base)	Low risk	20/12/2012
DCM	M106	B.C.G. - Dextrose Agar (Snyder Test Agar)	Low risk	20/12/2012
DCM	MV106	B.C.G. - Dextrose HiVeg™ Agar (Snyder Test HiVeg™ Agar)	Low risk	20/12/2012
DCM	MCD462	B.Q.Vaccine HiCynth™ Medium (Thioglycollate HiCynth™ Broth)	Low risk	28/04/2017
DCM	MV462	B.Q.Vaccine HiVeg™ Medium (Thioglycollate Broth w/ HiVeg™ Extract No. 2)	Low risk	20/12/2012
DCM	M462	B.Q.Vaccine Medium (Thioglycollate Broth w/ HL Extract)	Low risk	20/12/2012
DCM	M861	B.T.B. Lactose Agar	Low risk	20/12/2012
DCM	MCD861	B.T.B. Lactose HiCynth™ Agar	Low risk	28/04/2017
DCM	MCD1081	B.T.B. Lactose HiCynth™ Agar, Modified	Low risk	28/04/2017
DCM	MV861	B.T.B. Lactose HiVeg™ Agar	Low risk	20/12/2012
DCM	MV833	Bacillus Cereus HiVeg™ Agar Base	Low risk	22/04/2019
DCM	M833	Bacillus Cereus Agar Base	Low risk	22/04/2019
DCM	M805	Bacteroides Bile Esculin Agar Base (BBE)	Low risk	20/12/2012
DCM	MV805	Bacteroides HiVeg™ Agar Base (BBE)	Low risk	20/12/2012
DCM	M043	Baird Parker Agar Base	Low risk	20/12/2012
DCM	M2093	Baird Parker Agar Base w/o Egg Yolk Emulsion	Low risk	22/04/2019
DCM	MCD043	Baird Parker HiCynth™ Agar Base	Low risk	12/08/2015
DCM	MV043	Baird Parker HiVeg™ Agar Base	Low risk	20/12/2012
DCM	M1091	Baird Staphylococcus Enrichment Broth Base	Low risk	10/11/2020
DCM	M694	Bennet's Agar	Low risk	20/12/2012
DCM	M1683	Bennet's Broth	Low risk	20/12/2012
DCM	MV694	Bennet's HiVeg™ Agar	Low risk	20/12/2012
DCM	M1888	BETA-SSA Agar (Group A Streptococci Selective Agar)	Low risk	20/12/2012
DCM	M211	BHI Agar (Special Infusion Agar)	Low risk	20/12/2012
DCM	M211A	BHI Agar w/ 1% Agar	Low risk	20/12/2012
DCM	MV211A	BHI Agar w/ 1% Agar, HiVeg™	Low risk	20/12/2012
DCM	M1069	BHI Agar w/ 3.0% Agar	Low risk	20/12/2012
DCM	MV211	BHI Agar, HiVeg™ (Special Infusion Agar, HiVeg™)	Low risk	20/12/2012
DCM	M1611	BHI Agar, Modified	Low risk	20/12/2012
DCM	M210	BHI Broth	Low risk	20/12/2012
DCM	M210I	BHI Broth	Low risk	20/12/2012
DCM	M209	BHI CC Agar	Low risk	20/12/2012
DCM	MV209	BHI CC Agar, HiVeg™	Low risk	20/12/2012
DCM	MCD211	BHI HiCynth™ Agar (Special Insusion HiCynth™ Agar)	Low risk	12/08/2015

DCM	MCD210	BHI HiCynth™ Broth	Low risk	12/08/2015
DCM	M1036	BHI w/ 0.1% Agar	Low risk	20/12/2012
DCM	M1037	BHI w/ 6.5% NaCl	Low risk	20/12/2012
DCM	MV1037	BHI w/ 6.5% NaCl, HiVeg™	Low risk	20/12/2012
DCM	M212	BHI w/ PABA	Low risk	20/12/2012
DCM	M213	BHI w/ PABA and Agar	Low risk	20/12/2012
DCM	MV213	BHI w/ PABA and Agar, HiVeg™	Low risk	20/12/2012
DCM	MV212	BHI w/ PABA, HiVeg™	Low risk	20/12/2012
DCM	MV1036	BHI with 0.1% Agar, HiVeg™	Low risk	20/12/2012
DCM	MV210	BHI, HiVeg™	Low risk	20/12/2012
DCM	M217	Bi.G.G.Y. Agar (Nickerson Medium)	Low risk	20/12/2012
DCM	MCD217	Bi.G.G.Y. HiCynth™ Agar (Nickerson HiCynth™ Agar)	Low risk	25/08/2016
DCM	M1396	Bifidobacterium Agar	Low risk	10/11/2020
DCM	M1960R	Bifidobacterium Agar (HiCrome™)	Low risk	25/08/2016
DCM	M1396R	Bifidobacterium Agar (Modified, Selective Medium, Kit)	Low risk	04/07/2018
DCM	M1858	Bifidobacterium Agar, Modified	Low risk	20/12/2012
DCM	M1395	Bifidobacterium Broth	Low risk	10/11/2020
DCM	M071	Bile Broth Base	Low risk	20/12/2012
DCM	MV071	Bile Broth Base, HiVeg™	Low risk	20/12/2012
DCM	M972A	Bile Esculin Agar, Modified	Low risk	22/04/2019
DCM	M493	Bile Esculin Azide Agar	Low risk	10/11/2020
DCM	MV493	Bile Esculin Azide HiVeg™ Agar	Low risk	10/11/2020
DCM	MCD493	Bile Esculin Azide HiCynth™ Agar	Low risk	10/11/2020
DCM	M481	Bile Peptone Transport Medium	Low risk	20/12/2012
DCM	M739	Bile Salt Agar	Low risk	20/12/2012
DCM	MCD027	Bismuth Sulphite HiCynth™ Agar	Low risk	12/08/2015
DCM	M027	Bismuth Sulphite Agar	Low risk	20/12/2012
DCM	M027L	Bismuth Sulphite Agar	Low risk	04/07/2018
DCM	MU027	Bismuth Sulphite Agar Medium	Low risk	20/12/2012
DCM	M1004	Bismuth Sulphite Agar, Modified	Low risk	20/12/2012
DCM	MV027	Bismuth Sulphite HiVeg™ Agar	Low risk	20/12/2012
DCM	MV1004	Bismuth Sulphite HiVeg™ Agar, Modified	Low risk	20/12/2012
DCM	M073	Blood Agar Base (Infusion Agar)	Low risk	20/12/2012
DCM	M834	Blood Agar Base No. 2	Low risk	20/12/2012
DCM	M834A	Blood Agar Base No. 2 w/ 1.2% Agar	Low risk	20/12/2012
DCM	MV834A	Blood Agar Base No. 2 w/ 1.2% Agar, HiVeg™	Low risk	20/12/2012
DCM	MV834	Blood Agar Base No. 2, HiVeg™	Low risk	20/12/2012
DCM	M834Z	Blood Agar Base No.2	Low risk	28/04/2017
DCM	M089	Blood Agar Base w/ Low pH	Low risk	20/12/2012
DCM	MV089	Blood Agar Base w/ Low pH, HiVeg™	Low risk	20/12/2012

DCM	M1904	Blood Agar Base w/ Nalidixic Acid	Low risk	20/12/2012
DCM	MV073	Blood Agar Base, HiVeg™ (Infusion Agar, HiVeg™)	Low risk	20/12/2012
DCM	M1989	Blood Agar Base, Modified	Low risk	20/12/2012
DCM	M1318	Blood Free Campylobacter Broth Base	Low risk	20/12/2012
DCM	MCD073	Blood HiCynth™ Agar Base (Infusion HiCynth™ Agar Base)	Low risk	25/08/2016
DCM	MCD834	Blood HiCynth™ Agar Base No.2	Low risk	25/08/2016
DCM	MCD089	Blood HiCynth™ Agar Base w/ Low pH	Low risk	25/08/2016
DCM	M175	Bordet Gengou Agar Base	Low risk	20/12/2012
DCM	M175A	Bordet Gengou Agar Base w/ 1.6% Agar	Low risk	20/12/2012
DCM	M175SB	Bordet Gengou Agar Base, Modified	Low risk	16/12/2017
DCM	M2012	Bordet Gengou Broth	Low risk	25/08/2016
DCM	MV175	Bordet Gengou HiVeg™ Agar Base	Low risk	20/12/2012
DCM	MV175A	Bordet Gengou HiVeg™ Agar Base w/ 1.6% Agar	Low risk	20/12/2012
DCM	M1020	BPL Agar	Low risk	20/12/2012
DCM	MV1020	BPL HiVeg™ Agar	Low risk	20/12/2012
DCM	M016A	Brilliant Green Agar Base w/ 1.2% Agar	Low risk	20/12/2012
DCM	M971	Brilliant Green Agar Base w/ Phosphates	Low risk	20/12/2012
DCM	M016	Brilliant Green Agar Base, Modified	Low risk	20/12/2012
DCM	MCD016	Brilliant Green Agar HiCynth™ Base, Modified	Low risk	12/08/2015
DCM	MU016	Brilliant Green Agar Medium	Low risk	20/12/2012
DCM	MM016	Brilliant Green Agar Medium 16	Low risk	20/12/2012
DCM	MV016A	Brilliant Green HiVeg™ Agar Base w/ 1.2% Agar	Low risk	20/12/2012
DCM	MV971	Brilliant Green HiVeg™ Agar Base w/ Phosphates	Low risk	20/12/2012
DCM	MV016	Brilliant Green HiVeg™ Agar Base, Modified	Low risk	20/12/2012
DCM	M016B	Brilliant Green, Phenol Red, Lactose Monohydrate, Sucrose Agar (Agar Medium L)	Low risk	20/12/2012
DCM	ME016	Brilliant Green, Phenol Red, Lactose Monohydrate, Sucrose Agar (Agar Medium L)	Low risk	20/12/2012
DCM	M1822	Bromo Thymol Lactose Blue Agar	Low risk	16/12/2017
DCM	M074	Brucella Agar Base	Low risk	20/12/2012
DCM	M1638	Brucella Agar Base w/ 1.0% Dextrose	Low risk	20/12/2012
DCM	M1039	Brucella Agar Base w/ Hemin and Vitamin K	Low risk	20/12/2012
DCM	M074A	Brucella Agar Base, Modified	Low risk	20/12/2012
DCM	M5392	Brucella Broth Base	Low risk	30/10/2018
DCM	M348	Brucella Broth Base	Low risk	20/12/2012
DCM	MV074	Brucella HiVeg™ Agar Base	Low risk	20/12/2012
DCM	MV074A	Brucella HiVeg™ Agar Base, Modified	Low risk	20/12/2012
DCM	MV348	Brucella HiVeg™ Broth Base	Low risk	20/12/2012
DCM	M822	Brucella Selective Medium Base	Low risk	20/12/2012
DCM	M1890	BSIBG Agar (Aeromonas Selective Agar)	Low risk	10/11/2020
DCM	M1668	BSK - H Medium Base	Low risk	20/12/2012

DCM	M1668B	BSK - H Medium Base w/o BSA	Low risk	28/04/2017
DCM	M813	Buffered Charcoal Yeast Extract Agar Base	Low risk	20/12/2012
DCM	M813I	Buffered Charcoal Yeast Extract Agar Medium (BCYE Medium)	Low risk	20/12/2012
DCM	MCD813	Buffered Charcoal Yeast Extract HiCynth™ Medium	Low risk	25/08/2016
DCM	M204	Buffered Glycerol Saline Base	Low risk	20/12/2012
DCM	MCD1275	Buffered HiCynth™ Peptone Water w/ NaCl	Low risk	12/08/2015
DCM	MV614	Buffered HiVeg™ Peptone Water	Low risk	22/04/2019
DCM	MV1275	Buffered HiVeg™ Peptone Water w/NaCl	Low risk	20/12/2012
DCM	M614	Buffered Peptone Water	Low risk	22/04/2019
DCM	M1275	Buffered Peptone Water w/ NaCl	Low risk	20/12/2012
DCM	M1851	Buffered Peptone Water w/ Pyruvate	Low risk	20/12/2012
DCM	MH1275	Buffered Sodium Chloride-Peptone Solution pH 7.0	Low risk	22/04/2019
DCM	M1640	Burkholderia Cepacia Agar Base	Low risk	20/12/2012
DCM	MCD1640	Burkholderia cepacia HiCynth™ Agar Base	Low risk	25/08/2016
DCM	M2089	Burkholderia Cepacia Selectie Agar	Low risk	10/11/2020
DCM	MU2089	Burkholderia Cepacia Selective Agar (BCSA)	Low risk	10/11/2020
DCM	M470	BYE Agar	Low risk	20/12/2012
DCM	MV470	BYE HiVeg™ Agar	Low risk	20/12/2012
DCM	M911	C. botulinum Isolation Agar Base	Low risk	20/12/2012
DCM	MV911	C. botulinum Isolation HiVeg™ Agar Base	Low risk	20/12/2012
DCM	M1146	C.L.E.D. Agar Base w/o Indicator	Low risk	20/12/2012
DCM	M792	C.L.E.D. Agar w/ Bromo Thymol Blue	Low risk	20/12/2012
DCM	MCD792	C.L.E.D. HiCynth™ Agar w/BTB	Low risk	12/08/2015
DCM	MCD352	C.L.E.D. HiCynth™ Agar w/Andrade Indicator	Low risk	12/08/2015
DCM	MV1146	C.L.E.D. HiVeg™ Agar Base w/o Indicator	Low risk	20/12/2012
DCM	MV352	C.L.E.D. HiVeg™ Agar w/ Andrade Indicator	Low risk	20/12/2012
DCM	MV792	C.L.E.D. HiVeg™ Agar w/ Bromo Thymol Blue	Low risk	20/12/2012
DCM	M352	C.L.E.D. Agar w/ Andrade Indicator	Low risk	20/12/2012
DCM	M352M	C.L.E.D. Agar w/ Andrades Indicator	Low risk	22/04/2019
DCM	M352A	C.L.E.D. Agar w/o Lactose & w/ Andrades Indicator	Low risk	22/04/2019
DCM	M563	Caffeic Acid Ferric Citrate Test Agar (CAFC Medium)	Low risk	20/12/2012
DCM	M893	CAL Agar (Cellobiose Arginine Lysine Agar)	Low risk	20/12/2012
DCM	M894	CAL Broth (Cellobiose Arginine Lysine Broth)	Low risk	20/12/2012
DCM	MV893	CAL HiVeg™ Agar (Cellobiose Arginine Lysine HiVeg™ Agar)	Low risk	20/12/2012
DCM	MV894	CAL HiVeg™ Broth (Cellobiose Arginine Lysine HiVeg™ Broth)	Low risk	20/12/2012
DCM	MV908	Campylo Thioglycollate HiVeg™ Medium Base	Low risk	20/12/2012
DCM	M908	Campylo Thioglycollate Medium Base	Low risk	20/12/2012
DCM	M994	Campylobacter Agar Base	Low risk	20/12/2012
DCM	M1267	Campylobacter Cefex Agar Base	Low risk	20/12/2012
DCM	M899	Campylobacter Enrichment Broth Base (Preston Enrichment Broth Base)	Low risk	20/12/2012

DCM	MV899	Campylobacter Enrichment HiVeg™ Broth Base (Preston Enrichment HiVeg™ Broth Base)	Low risk	20/12/2012
DCM	MV994	Campylobacter HiVeg™ Agar Base	Low risk	20/12/2012
DCM	M1240	Campylobacter Nitrate Broth	Low risk	20/12/2012
DCM	MV1240	Campylobacter Nitrate HiVeg™ Broth	Low risk	20/12/2012
DCM	M1602	Candida Agar	Low risk	20/12/2012
DCM	M355	Candida BCG Agar Base	Low risk	20/12/2012
DCM	MV355	Candida BCG HiVeg™ Agar Base	Low risk	20/12/2012
DCM	MV104	Candida HiVeg™ Medium	Low risk	20/12/2012
DCM	M104	Candida Medium	Low risk	20/12/2012
DCM	M202	Cary - Blair Medium Base (Transport Medium w/o Charcoal)	Low risk	20/12/2012
DCM	M202A	Cary Blair Medium, Liquid w/o charcoal	Low risk	25/08/2016
DCM	M794	Casitose Agar w/ 2.5% Agar	Low risk	20/12/2012
DCM	M200	Casitose Broth	Low risk	20/12/2012
DCM	M910	Casitose Yeast Extract Broth (CAYE)	Low risk	20/12/2012
DCM	MV910	Casitose Yeast Extract HiVeg™ Broth (CAYE)	Low risk	20/12/2012
DCM	M201	Casman Agar Base	Low risk	20/12/2012
DCM	M766	Casman Broth Base	Low risk	20/12/2012
DCM	MV201	Casman HiVeg™ Agar Base	Low risk	20/12/2012
DCM	MV766	Casman HiVeg™ Broth Base	Low risk	20/12/2012
DCM	MH024	Cetrimide Agar	Low risk	22/04/2019
DCM	M024	Cetrimide Agar Base	Low risk	20/12/2012
DCM	M1742	Cetrimide Agar Base (w 1.3% Agar)	Low risk	20/12/2012
DCM	M862	Cetrimide Broth	Low risk	20/12/2012
DCM	MCD024	Cetrimide HiCynth™ Agar Base	Low risk	12/08/2015
DCM	MV024	Cetrimide HiVeg™ Agar Base	Low risk	20/12/2012
DCM	MV862	Cetrimide HiVeg™ Broth	Low risk	20/12/2012
DCM	M344	Charcoal Agar Base	Low risk	10/11/2020
DCM	MV344	Charcoal Agar Base, HiVeg™	Low risk	10/11/2020
DCM	M1053	Charcoal Agar Base with Niacin	Low risk	16/12/2017
DCM	M646	Charcoal Blood Agar Base	Low risk	10/11/2020
DCM	MV646	Charcoal Blood Agar Base, HiVeg™	Low risk	10/11/2020
DCM	M103	Chocolate Agar Base	Low risk	20/12/2012
DCM	MV103	Chocolate HiVeg™ Agar Base	Low risk	20/12/2012
DCM	M1548	Chocolate No. 2 Agar Base	Low risk	20/12/2012
DCM	MV1548	Chocolate No. 2 HiVeg™ Agar Base	Low risk	20/12/2012
DCM	MV558	Cholera HiVeg™ Medium Base	Low risk	20/12/2012
DCM	M558	Cholera Medium Base	Low risk	20/12/2012
DCM	M143	Christensen Citrate Agar	Low risk	20/12/2012
DCM	M1820	Chrysoidin Agar with MUG	Low risk	16/12/2017

DCM	M497	Clostridial Agar	Low risk	20/12/2012
DCM	MV497	Clostridial HiVeg™ Agar	Low risk	20/12/2012
DCM	M836	Clostridium Difficile Agar Base	Low risk	20/12/2012
DCM	MV836	Clostridium Difficile HiVeg™ Agar Base	Low risk	20/12/2012
DCM	M1976	Clostridium difficile Mannitol Taurocholate Broth base (CCMB -TAL Broth)	Low risk	20/12/2012
DCM	M272	Coagulase Mannitol Agar Base	Low risk	20/12/2012
DCM	M277	Coagulase Mannitol Broth Base	Low risk	20/12/2012
DCM	MV272	Coagulase Mannitol HiVeg™ Agar Base	Low risk	20/12/2012
DCM	MV277	Coagulase Mannitol HiVeg™ Broth Base	Low risk	20/12/2012
DCM	M1826	Coliform Broth w/SLS	Low risk	22/04/2019
DCM	MV1826	Coliform HiVeg Broth w/ SLS	Low risk	22/04/2019
DCM	MH144	Columbia Agar	Low risk	22/04/2019
DCM	M144M	Columbia Agar	Low risk	22/04/2019
DCM	M144PM	Columbia Blood Agar Base	Low risk	22/04/2019
DCM	M144R	Columbia Blood Agar Base	Low risk	25/08/2016
DCM	M144	Columbia Blood Agar Base	Low risk	20/12/2012
DCM	M144A	Columbia Blood Agar Base w/ 1% Agar	Low risk	20/12/2012
DCM	MV144A	Columbia Blood Agar Base w/ 1% Agar, HiVeg™	Low risk	20/12/2012
DCM	M1133	Columbia Blood Agar Base w/ Hemin	Low risk	20/12/2012
DCM	MV144	Columbia Blood Agar Base, HiVeg™	Low risk	20/12/2012
DCM	MCD144	Columbia Blood HiCynth™ Agar Base	Low risk	12/08/2015
DCM	MCD144A	Columbia Blood HiCynth™ Agar Base w/1% Agar	Low risk	12/08/2015
DCM	M145	Columbia Broth Base	Low risk	20/12/2012
DCM	MV145	Columbia Broth Base, HiVeg™	Low risk	20/12/2012
DCM	M560	Columbia C.N.A. Agar Base	Low risk	20/12/2012
DCM	M560A	Columbia C.N.A. Agar Base w/ 1% Agar	Low risk	20/12/2012
DCM	MV560	Columbia C.N.A. HiVeg™ Agar Base	Low risk	20/12/2012
DCM	MV560A	Columbia C.N.A. HiVeg™ Agar Base w/ 1% Agar	Low risk	20/12/2012
DCM	MCD145	Columbia HiCynth™ Broth	Low risk	12/08/2015
DCM	M2103	Congo Red Magnesium Oxalate (CR-MOX) Agar	Low risk	22/04/2019
DCM	M730	Conn's Agar	Low risk	20/12/2012
DCM	M149	Cooked M Medium (R.C .Medium)	Low risk	16/12/2017
DCM	M1040	Cooked M Medium w/ Glucose, Hemin & Vitamin K	Low risk	16/12/2017
DCM	MV731	Corn Meal HiVeg™ Peptone Yeast Agar	Low risk	20/12/2012
DCM	M731	Corn Meal Peptone Yeast Agar	Low risk	20/12/2012
DCM	M897	Crystal Violet Lactose Agar	Low risk	10/11/2020
DCM	MV897	Crystal Violet Lactose HiVeg™ Agar	Low risk	10/11/2020
DCM	M1892	CTAS Agar Base (Carnobacterium Selective Agar Base)	Low risk	20/12/2012
DCM	M172	Cystine H Agar Base	Low risk	20/12/2012

DCM	MV172	Cystine HiVeg™ Agar Base	Low risk	20/12/2012
DCM	M881	Cystine Tellurite Agar Base	Low risk	20/12/2012
DCM	M160	D.C.L.S. Agar	Low risk	20/12/2012
DCM	M178	D.C.L.S. Agar, Hajna	Low risk	20/12/2012
DCM	MV160	D.C.L.S. HiVeg™ Agar	Low risk	20/12/2012
DCM	MV178	D.C.L.S. HiVeg™ Agar	Low risk	20/12/2012
DCM	M188	D.T.M. Agar Base (Dermatophyte Test Agar Base)	Low risk	20/12/2012
DCM	M501	Decarboxylase Agar Base	Low risk	20/12/2012
DCM	M393	Decarboxylase Broth Base, Moeller (Moeller Decarboxylase Broth Base)	Low risk	20/12/2012
DCM	MV501	Decarboxylase HiVeg™ Agar Base	Low risk	20/12/2012
DCM	MV393	Decarboxylase HiVeg™ Broth Base, Moeller (Moeller Decarboxylase HiVeg™ Broth Base)	Low risk	20/12/2012
DCM	M030	Deoxycholate Agar	Low risk	20/12/2012
DCM	MV030	Deoxycholate Agar, HiVeg™	Low risk	20/12/2012
DCM	M065	Deoxycholate Citrate Agar	Low risk	20/12/2012
DCM	M1639	Deoxycholate Citrate Agar w/1.5% Agar	Low risk	20/12/2012
DCM	M222	Deoxycholate Citrate Agar w/o Sucrose	Low risk	20/12/2012
DCM	MV065	Deoxycholate Citrate Agar, HiVeg™	Low risk	20/12/2012
DCM	MCD065	Deoxycholate Citrate HiCynth™ Agar	Low risk	12/08/2015
DCM	M084	Dextrose Agar	Low risk	20/12/2012
DCM	M286	Dextrose Agar Base, Emmons (Sabouraud Dextrose Agar Base, Modified)	Low risk	20/12/2012
DCM	MV084	Dextrose HiVeg™ Agar	Low risk	20/12/2012
DCM	MV286	Dextrose HiVeg™ Agar Base, Emmons (Sabouraud Dextrose HiVeg™ AgarBase, Modified)	Low risk	20/12/2012
DCM	M734	Dextrose Proteose Peptone Agar Base	Low risk	20/12/2012
DCM	MV734	Dextrose Proteose Peptone HiVeg™ Agar Base	Low risk	20/12/2012
DCM	M502	Diagnostic Sensitivity Test Agar (D.S.T. Agar)	Low risk	20/12/2012
DCM	M111	Diagnostic Stuart's Urea Broth Base (Urea Broth Base)	Low risk	20/12/2012
DCM	MV191	Diagnostic Thioglycollate HiVeg™ Medium (Thioglycollate HiVeg™ Medium w/o Indicator)	Low risk	20/12/2012
DCM	M191	Diagnostic Thioglycollate Medium (Thioglycollate Medium w/o Indicator)	Low risk	20/12/2012
DCM	M1129	Dichloran Glycerol Medium Base	Low risk	22/04/2019
DCM	M1049	Differential Agar for Group D Streptococci	Low risk	10/11/2020
DCM	M814	Differential Buffered Charcoal Yeast Extract Agar Base	Low risk	20/12/2012
DCM	M1603	Differential Reinforced Clostridial Agar	Low risk	10/11/2020
DCM	M915	Dihydrolase Broth Base	Low risk	20/12/2012
DCM	MV915	Dihydrolase HiVeg™ Broth Base	Low risk	20/12/2012
DCM	MM1276	Dilute Sautans Medium (Twin Pack)	Low risk	20/12/2012
DCM	M882	Diphtheria Virulence Agar Base	Low risk	25/08/2016
DCM	M882R	Diphtheria Virulence Agar Base Modified	Low risk	25/08/2016

DCM	MV882	Diphtheria Virulence HiVeg™ Agar Base	Low risk	25/08/2016
DCM	M1984	Dixon's Agar	Low risk	20/12/2012
DCM	M1419	DNase Test Agar w/ Methyl Green	Low risk	10/11/2020
DCM	M057	Double Sugar Agar, Russell (Russell Double Sugar Agar)	Low risk	20/12/2012
DCM	MV057	Double Sugar HiVeg™ Agar (Russell Double Sugar HiVeg™ Agar)	Low risk	20/12/2012
DCM	M916	Doyle's Enrichment Broth Base	Low risk	20/12/2012
DCM	MV916	Doyle's Enrichment HiVeg™ Broth Base	Low risk	20/12/2012
DCM	M1378	Drigalski Lactose Agar, Modified	Low risk	20/12/2012
DCM	M1761	Drigalski Lactose Selective Agar	Low risk	20/12/2012
DCM	M659	Drigalski Litmus Lactose Agar	Low risk	20/12/2012
DCM	MV659	Drigalski Litmus Lactose HiVeg™ Agar	Low risk	20/12/2012
DCM	M5349	DTP Medium	Low risk	30/10/2018
DCM	M067	Dubos Broth Base	Low risk	20/12/2012
DCM	MV067	Dubos HiVeg™ Broth Base	Low risk	20/12/2012
DCM	M179	Dubos Oleic Agar Base	Low risk	20/12/2012
DCM	M839	Dubos Oleic Broth Base	Low risk	20/12/2012
DCM	MV179	Dubos Oleic HiVeg™ Agar Base	Low risk	20/12/2012
DCM	MV839	Dubos Oleic HiVeg™ Broth Base	Low risk	20/12/2012
DCM	M1536	Dulcitol Selenite Broth (Selenite-F Broth w/ Dulcitol) (Twin Pack)	Low risk	20/12/2012
DCM	M854	E.T. Medium	Low risk	20/12/2012
DCM	M1768	EC Blue Broth	Low risk	20/12/2012
DCM	MV1768	EC Blue HiVeg™ Broth	Low risk	20/12/2012
DCM	M127	EC Broth	Low risk	20/12/2012
DCM	M1271	EC Broth	Low risk	20/12/2012
DCM	MV127	EC HiVeg™ Broth	Low risk	20/12/2012
DCM	M748	Edward's Medium Base, Modified	Low risk	20/12/2012
DCM	MV748	Edward's Medium HiVeg™ Base, Modified	Low risk	20/12/2012
DCM	M294	Edwards and Bruner Semisolid Medium	Low risk	20/12/2012
DCM	M808	Egg Yolk Agar Base	Low risk	20/12/2012
DCM	MV808	Egg Yolk Agar Base, HiVeg™	Low risk	20/12/2012
DCM	M1043	Egg Yolk Agar Base, Modified	Low risk	20/12/2012
DCM	M086	Eijkman Lactose Broth	Low risk	20/12/2012
DCM	MV086	Eijkman Lactose HiVeg™ Broth	Low risk	20/12/2012
DCM	M368	Elliker Broth (Lactobacilli Broth)	Low risk	10/11/2020
DCM	MV368	Elliker HiVeg™ Broth (Lactobacilli HiVeg™ Broth)	Low risk	10/11/2020
DCM	M317	EMB Agar	Low risk	20/12/2012
DCM	M301	EMB Agar Base	Low risk	20/12/2012
DCM	M022	EMB Agar, Levine	Low risk	20/12/2012
DCM	M022S	EMB Agar, Levine	Low risk	20/12/2012
DCM	M503	EMB Broth	Low risk	20/12/2012

DCM	MV317	EMB HiVeg™ Agar	Low risk	20/12/2012
DCM	MV022	EMB HiVeg™ Agar, Levine	Low risk	20/12/2012
DCM	MV503	EMB HiVeg™ Broth	Low risk	20/12/2012
DCM	M325	Emerson Agar	Low risk	20/12/2012
DCM	MV325	Emerson HiVeg™ Agar	Low risk	20/12/2012
DCM	M773	Emerson YSS Agar	Low risk	20/12/2012
DCM	M029	Endo Agar	Low risk	20/12/2012
DCM	M1077	Endo Agar Base	Low risk	20/12/2012
DCM	M1258	Endo Agar w/ NaCl	Low risk	20/12/2012
DCM	M1075	Endo Agar, Modified	Low risk	20/12/2012
DCM	M029R	Endo Agar, Special	Low risk	25/08/2016
DCM	MCD029	Endo HiCynth™ Agar	Low risk	12/08/2015
DCM	MV029	Endo HiVeg™ Agar	Low risk	20/12/2012
DCM	MV1077	Endo HiVeg™ Agar Base	Low risk	20/12/2012
DCM	MV1258	Endo HiVeg™ Agar w/ NaCl	Low risk	20/12/2012
DCM	MV1075	Endo HiVeg™ Agar, Modified	Low risk	20/12/2012
DCM	M738	Enriched Thioglycollate Broth	Low risk	20/12/2012
DCM	MV738	Enriched Thioglycollate HiVeg™ Broth	Low risk	20/12/2012
DCM	MV077	Entamoeba HiVeg™ Medium	Low risk	20/12/2012
DCM	M077	Entamoeba Medium	Low risk	20/12/2012
DCM	M1662	Enteric Fermentation Base	Low risk	20/12/2012
DCM	MH287	Enterobacteria Enrichment Broth, Mossel	Low risk	22/04/2019
DCM	M426	Ethyl Violet Azide Broth (E.V.A. Broth)	Low risk	20/12/2012
DCM	M426S	Ethyl Violet Azide Broth (E.V.A. Broth)	Low risk	20/12/2012
DCM	M1397	Ethyl Violet Azide Dextrose Agar	Low risk	20/12/2012
DCM	MV426	Ethyl Violet Azide HiVeg™ Broth (E.V.A. HiVeg™ Broth)	Low risk	20/12/2012
DCM	M428	Eugonic Agar	Low risk	20/12/2012
DCM	M429	Eugonic Broth	Low risk	20/12/2012
DCM	MV428	Eugonic HiVeg™ Agar	Low risk	20/12/2012
DCM	MV429	Eugonic HiVeg™ Broth	Low risk	20/12/2012
DCM	M1517	Eugonic LT 100 Broth Base w/o Tween 80	Low risk	20/12/2012
DCM	M1517Z	Eugonic LT 100 Broth Base w/o Tween 80	Low risk	17/06/2021
DCM	M811	Feeley Gorman Agar (F.G. Agar)	Low risk	20/12/2012
DCM	M812	Feeley Gorman Broth (F.G. Broth)	Low risk	20/12/2012
DCM	MV811	Feeley Gorman HiVeg™ Agar (F.G. HiVeg™ Agar)	Low risk	20/12/2012
DCM	MV812	Feeley Gorman HiVeg™ Broth (F.G. HiVeg™ Broth)	Low risk	20/12/2012
DCM	M827	Fermentation Medium for Staphylococcus and Micrococcus	Low risk	20/12/2012
DCM	MV919	Fermentation HiVeg™ Medium Base for C. perfringens	Low risk	20/12/2012
DCM	MV825	Fermentation HiVeg™ Medium for Neisseriae	Low risk	20/12/2012
DCM	MV827	Fermentation HiVeg™ Medium for Staphylococcus and Micrococcus	Low risk	20/12/2012

DCM	M919	Fermentation Medium Base for C. perfringens	Low risk	20/12/2012
DCM	M825	Fermentation Medium for Neisseriae	Low risk	20/12/2012
DCM	M1028	Field's Tryptic Digest Broth (Tryptic Digest Broth)	Low risk	20/12/2012
DCM	MV1028	Field's Tryptic digest Broth, HiVeg™ (Tryptic Digest Broth, HiVeg™)	Low risk	20/12/2012
DCM	MV239	Fletcher Leptospira HiVeg™ Medium Base (Leptospira HiVeg™ MediumBase, Fletcher)	Low risk	20/12/2012
DCM	M239	Fletcher Leptospira Medium Base (Leptospira Medium Base, Fletcher)	Low risk	20/12/2012
DCM	M1209	Fluconazole Testing Medium (Twin Pack)	Low risk	20/12/2012
DCM	MV013	Fluid Sabouraud HiVeg™ Medium (Sabouraud Medium, Fluid, HiVeg™)	Low risk	20/12/2012
DCM	M013	Fluid Sabouraud Medium (Sabouraud Medium, Fluid)	Low risk	20/12/2012
DCM	M1533I	Fluid Selenite Cystine Broth (Twin Pack)	Low risk	20/12/2012
DCM	MV025	Fluid Selenite Cystine HiVeg™ Medium (Selenite Cystine HiVeg™ Broth) (Twin Pack)	Low risk	20/12/2012
DCM	M025	Fluid Selenite Cystine Medium (Selenite Cystine Broth) (Twin Pack)	Low risk	20/12/2012
DCM	MM025	Fluid Selenite Cystine Medium (Twin Pack)	Low risk	20/12/2012
DCM	MU025	Fluid Selenite Cystine Medium (Twin Pack)	Low risk	20/12/2012
DCM	MCD032	Fluid Tetrathionate HiCynth™ Medium w/o Iodine and BG	Low risk	25/08/2016
DCM	MV032	Fluid Tetrathionate HiVeg™ Medium w/o Iodine and BG (Tetrathionate HiVeg™ Broth Base w/o Iodine & BG)	Low risk	20/12/2012
DCM	M032	Fluid Tetrathionate Medium w/o Iodine and BG (Tetrathionate Broth Base w/o Iodine and BG)	Low risk	20/12/2012
DCM	MV009	Fluid Thioglycollate HiVeg™ Medium	Low risk	22/04/2019
DCM	M009	Fluid Thioglycollate medium (Thioglycollate medium Fluid)	Low risk	22/04/2019
DCM	M543	Folic Acid Casei Medium	Low risk	20/12/2012
DCM	M2014	Folic Acid Casei Medium, Modified	Low risk	25/08/2016
DCM	M1050	Frey Mycoplasma Broth Base	Low risk	20/12/2012
DCM	M475	Fungobiotic Agar (Mycobio Agar)	Low risk	10/11/2020
DCM	M476	Garrod Actinomyces Medium	Low risk	10/11/2020
DCM	M1073	GBS Medium Base	Low risk	28/04/2017
DCM	M434	GC Agar Base	Low risk	25/08/2016
DCM	MV434	GC HiVeg™ Agar Base	Low risk	04/07/2018
DCM	M5397	Gifu Anaerobic Broth w/o starch & dextrose	Low risk	22/04/2019
DCM	M2079	Gifu Anaerobic Broth, Modified (GAM)	Low risk	04/07/2018
DCM	M1746	Glucose Agar	Low risk	10/11/2020
DCM	M435	Glucose Citrate Broth Base	Low risk	20/12/2012
DCM	M433	Glucose Cysteine Agar Base w/ Thiamine	Low risk	20/12/2012
DCM	MV433	Glucose Cysteine HiVeg™ Agar Base w/ Thiamine	Low risk	20/12/2012
DCM	M070	Glucose Phosphate Broth (Buffered Glucose Broth)	Low risk	20/12/2012
DCM	MV070	Glucose Phosphate HiVeg™ Broth (Buffered Glucose HiVeg™ Broth)	Low risk	20/12/2012
DCM	M621	Glucose Salt Teepol Broth (Twin Pack)	Low risk	20/12/2012

DCM	MV621	Glucose Salt Teepol HiVeg™ Broth (Twin Pack)	Low risk	20/12/2012
DCM	M1935	Glycerol Mannitol Acetamide Cetrinide Agar	Low risk	20/12/2012
DCM	M242	GN Broth, Hajna	Low risk	20/12/2012
DCM	MV242	GN HiVeg™ Broth	Low risk	20/12/2012
DCM	M1888	Group A Streptococci Selective Agar (BETA-SSA Agar)	Low risk	20/12/2012
DCM	M1607	Gum Listeria Medium	Low risk	20/12/2012
DCM	M243	H Broth	Low risk	20/12/2012
DCM	MV116	H.S. Vaccine HiVeg™ Medium (Standard Nutrient HiVeg™ Broth)	Low risk	20/12/2012
DCM	M116	H.S. Vaccine Medium (Standard Nutrient Broth)	Low risk	20/12/2012
DCM	M1259	Haemophilus Test Agar Base	Low risk	20/12/2012
DCM	M551	Hartley's Digest Broth	Low risk	20/12/2012
DCM	MV551	Hartley's Digest HiVeg™ Broth	Low risk	20/12/2012
DCM	M467	Hektoen Enteric Agar	Low risk	20/12/2012
DCM	MU467	Hektoen Enteric Agar Medium	Low risk	20/12/2012
DCM	MCD467	Hektoen Enteric HiCynth™ Agar	Low risk	12/08/2015
DCM	MV467	Hektoen Enteric HiVeg™ Agar	Low risk	20/12/2012
DCM	M5390	Helicobacter Pylori Selective Agar	Low risk	30/10/2018
DCM	M1158	Hemorrhagic Coli (HC) Agar	Low risk	20/12/2012
DCM	M169	HI Agar	Low risk	20/12/2012
DCM	MV169	HI Agar, HiVeg™	Low risk	20/12/2012
DCM	M170	HI Broth	Low risk	20/12/2012
DCM	MV170	HI Broth, HiVeg™	Low risk	20/12/2012
DCM	M1938	HiCrome™ Acinetobacter Agar Base	Low risk	20/12/2012
DCM	M1651	HiCrome™ Bacillus Agar	Low risk	25/08/2016
DCM	MCD1651	HiCrome™ Bacillus HiCynth™ Agar	Low risk	25/08/2016
DCM	M1960	HiCrome™ Bifidobacterium Agar	Low risk	20/12/2012
DCM	M1456AR	HiCrome™ Candida Differential Agar, Modified	Low risk	25/08/2016
DCM	MCD1297A	HiCrome™ Candida Differential HiCynth™ Agar	Low risk	12/08/2015
DCM	M1832	HiCrome Coliform Agar Modified	Low risk	22/04/2019
DCM	MV1300	HiCrome Coliform HiVeg Agar w/ SLS	Low risk	22/04/2019
DCM	MV1295	HiCrome E. coli HiVeg™ Agar	Low risk	22/04/2019
DCM	MV1293	HiCrome ECC HiVeg™ Agar	Low risk	22/04/2019
DCM	MV1294	HiCrome ECC Selective HiVeg Agar Base	Low risk	22/04/2019
DCM	M1598	HiCrome Enrichment Broth Base for EC O157:H7	Low risk	22/04/2019
DCM	M1577	HiCrome™ Enterobacter sakazakii Agar	Low risk	22/04/2019
DCM	M1641	HiCrome Enterobacter sakazakii Agar, Modified	Low risk	22/04/2019
DCM	MV1577	HiCrome Enterobacter sakazakii HiVeg™ Agar	Low risk	22/04/2019
DCM	MV1641	HiCrome Enterobacter sakazakii HiVeg™ Agar, Modified	Low risk	22/04/2019
DCM	M1580	HiCrome™ Enterococcus faecium Agar Base	Low risk	25/08/2016
DCM	MCD1466	HiCrome™ Improved Salmonella HiCynth™ Agar	Low risk	12/08/2015

DCM	M1569	HiCrome M-Lauryl Sulphate Agar	Low risk	22/04/2019
DCM	M1862	HiCrome M-Modified ECO157:H7 Selective Agar Base	Low risk	22/04/2019
DCM	M1571	HiCrome M-TEC Agar	Low risk	22/04/2019
DCM	M1713	HiCrome M-TEC Broth	Low risk	22/04/2019
DCM	M1985	HiCrome™ Malassezia Agar	Low risk	20/12/2012
DCM	M1953R	HiCrome™ MeReSa Agar Base (Modified)	Low risk	25/08/2016
DCM	M1953	HiCrome™ MeReSa Agar Base (Modified)	Low risk	25/08/2016
DCM	M2010	HiCrome™ Mueller Hinton Agar	Low risk	25/08/2016
DCM	M1974	HiCrome™ Rapid MRSA Agar Base	Low risk	20/12/2012
DCM	M1842	HiCrome Selective Salmonella Agar Base	Low risk	22/04/2019
DCM	M1353R	HiCrome™ UTI Agar	Low risk	25/08/2016
DCM	MCD1353	HiCrome™ UTI HiCynth™™ Agar	Low risk	12/08/2015
DCM	MV1353R	HiCrome™ UTI HiVeg™ Agar	Low risk	25/08/2016
DCM	MV1682	HiCrome Vibrio HiVeg™ Agar	Low risk	22/04/2019
DCM	M2114	HiCrome™ C.auris (MDR) Selective Agar Base	Low risk	10/11/2020
DCM	M2020	HiCrome™ Campylobacter Agar Base	Low risk	16/12/2017
DCM	M1297A	HiCrome™ Candida Differential Agar	Low risk	20/12/2012
DCM	M1297AR	HiCrome™ Candida Differential Agar Base	Low risk	20/12/2012
DCM	M1456A	HiCrome™ Candida Differential Agar Base, Modified	Low risk	20/12/2012
DCM	MV1297A	HiCrome™ Candida Differential HiVeg™ Agar	Low risk	20/12/2012
DCM	MV1456A	HiCrome™ Candida Differential HiVeg™ Agar Base, Modified	Low risk	20/12/2012
DCM	M2099	HiCrome™ CarbaResist Agar Base	Low risk	22/04/2019
DCM	M1991I	HiCrome™ Chromogenic Coliform Agar (CCA)	Low risk	22/04/2019
DCM	M2026	HiCrome™ Clostridial Agar Base	Low risk	25/08/2016
DCM	M1300	HiCrome™ Coliform Agar w/ SLS	Low risk	22/04/2019
DCM	MCD1300	HiCrome™ Coliform HiCynth™ Agar w/ SLS	Low risk	10/11/2020
DCM	M2094	HiCrome™ Colistin Resistant Agar Base	Low risk	30/10/2018
DCM	M2062I	HiCrome™ Cronobacter Isolation Agar (CCI Agar)	Low risk	10/11/2020
DCM	M1295	HiCrome™ E. coli Agar	Low risk	22/04/2019
DCM	M1295I	HiCrome™ E. coli Agar	Low risk	22/04/2019
DCM	MCD1295	HiCrome™ E.coli HiCynth™ Agar	Low risk	22/04/2019
DCM	MCD1580	HiCrome™ E.faecium HiCynth™ Agar Base	Low risk	25/08/2016
DCM	M1575A	HiCrome™ EC O157 : H7 Selective Agar Base, Modified	Low risk	10/11/2020
DCM	MV1575A	HiCrome™ EC O157 : H7 Selective HiVeg™ Agar Base, Modified	Low risk	10/11/2020
DCM	MCD1575A	HiCrome™ EC O157:H7 HiCynth™ Agar Base, Modified	Low risk	10/11/2020
DCM	M1574A	HiCrome™ EC O157:H7 Agar,Modified	Low risk	22/04/2019
DCM	M1293	HiCrome™ ECC Agar	Low risk	22/04/2019
DCM	M1294	HiCrome™ ECC Selective Agar Base	Low risk	22/04/2019
DCM	M2056	HiCrome™ ECC Selective Agar Base, Modified	Low risk	22/04/2019
DCM	M1488	HiCrome™ ECD Agar w/ MUG	Low risk	10/11/2020

DCM	MV1488	HiCrome™ ECD HiVeg™ Agar w/ MUG	Low risk	10/11/2020
DCM	MCD1598	HiCrome™ Enrichment HiCynth™ Broth Base for ECO157:H7	Low risk	10/11/2020
DCM	MCD1641	HiCrome™ Enterobacter sakazakii HiCynth™ Agar, Modified (HiCrome™ Cronobacter sakazakii HiCynth™ Agar, Modified)	Low risk	10/11/2020
DCM	M1376	HiCrome™ Enterococci Broth	Low risk	10/11/2020
DCM	MCD1376	HiCrome™ Enterococci HiCynth™ Broth	Low risk	10/11/2020
DCM	MV1376	HiCrome™ Enterococci HiVeg™ Broth	Low risk	10/11/2020
DCM	MV1580	HiCrome™ Enterococcus faecium HiVeg™ Agar Base	Low risk	10/11/2020
DCM	M1829	HiCrome™ ESBL Agar Base	Low risk	20/12/2012
DCM	M2128	HiCrome™ Haemophilus Agar Base	Low risk	17/06/2021
DCM	M1466	HiCrome™ Improved Salmonella Agar	Low risk	20/12/2012
DCM	MV1466	HiCrome™ Improved Salmonella HiVeg™ Agar	Low risk	20/12/2012
DCM	M1573	HiCrome™ Klebsiella Selective Agar Base	Low risk	10/11/2020
DCM	MV1573	HiCrome™ Klebsiella Selective HiVeg™ Agar Base	Low risk	10/11/2020
DCM	M1831	HiCrome™ KPC Agar Base	Low risk	20/12/2012
DCM	M2009	HiCrome™ L mono differential Agar Base	Low risk	10/11/2020
DCM	M1924	HiCrome™ L.mono Rapid Differential Agar Base	Low risk	10/11/2020
DCM	M2065	HiCrome™ Lactobacillus Selective Agar Base	Low risk	10/11/2020
DCM	M1417F	HiCrome™ Listeria Agar Base	Low risk	10/11/2020
DCM	M1417	HiCrome™ Listeria Agar Base, Modified	Low risk	10/11/2020
DCM	MCD1417	HiCrome™ Listeria HiCynth™ Agar Base, Modified	Low risk	10/11/2020
DCM	M1340	HiCrome™ MacConkey Sorbitol Agar Base	Low risk	20/12/2012
DCM	MCD1340	HiCrome™ MacConkey Sorbitol HiCynth™ Agar	Low risk	25/08/2016
DCM	M2058	HiCrome™ M-Coliconfirm Agar Base	Low risk	10/11/2020
DCM	M2064	HiCrome™ M-Coliconfirm Broth Base	Low risk	22/04/2019
DCM	M1674	HiCrome™ MeReSa Agar Base	Low risk	20/12/2012
DCM	MCD1674	HiCrome™ MeReSa HiCynth™ Agar Base	Low risk	25/08/2016
DCM	MV1674	HiCrome™ MeReSa HiVeg™ Agar Base	Low risk	20/12/2012
DCM	M1393	HiCrome™ MM Agar	Low risk	20/12/2012
DCM	M1816	HiCrome™ MM Agar , Modified	Low risk	04/07/2018
DCM	M1816R	HiCrome™ MM Agar , Modified	Low risk	04/07/2018
DCM	MCD1816	HiCrome™ MM HiCynth™ Agar, Modified (HiCrome™ Miller and Mallinson HiCynth™ Agar)	Low risk	10/11/2020
DCM	MV1393	HiCrome™ MM HiVeg™ Agar	Low risk	20/12/2012
DCM	MCD1571	HiCrome™ M-TEC HiCynth™ Agar	Low risk	10/11/2020
DCM	MCD1713	HiCrome™ M-TEC HiCynth™ Broth	Low risk	10/11/2020
DCM	M2067	HiCrome™ Mueller Hinton Agar (for antifungal)	Low risk	16/12/2017
DCM	M1712	HiCrome™ Nickels and Leesment Medium	Low risk	10/11/2020
DCM	MV1712	HiCrome™ Nickels & Leesment HiVeg™ Agar Base	Low risk	10/11/2020
DCM	MCD1633	HiCrome™ RajHans HiCynth™ Medium (Salmonella HiCynth™ Agar)	Low risk	25/08/2016

DCM	M1633	HiCrome™ RajHans Medium (Salmonella Agar)	Low risk	20/12/2012
DCM	M1634	HiCrome™ RajHans Medium, Modified (Salmonella Agar, Modified)	Low risk	20/12/2012
DCM	M2011	HiCrome™ Rapid ECC Broth	Low risk	22/04/2019
DCM	MCD1974	HiCrome™ Rapid MRSA HiCynth™ Agar Base	Low risk	25/08/2016
DCM	M2116	HiCrome™ Salmoconfirm Selective Agar	Low risk	10/11/2020
DCM	M1296	HiCrome™ Salmonella Agar	Low risk	20/12/2012
DCM	MV1296	HiCrome™ Salmonella HiVeg™ Agar	Low risk	20/12/2012
DCM	MCD1842	HiCrome™ Selective Salmonella HiCynth™ Agar Base	Low risk	10/11/2020
DCM	M1837	HiCrome™ Staph Agar Base, Modified	Low risk	20/12/2012
DCM	M1931	HiCrome™ Staph Selective Agar	Low risk	10/11/2020
DCM	M2092	HiCrome™ STEC Agar Base	Low risk	30/10/2018
DCM	M1840	HiCrome™ Strep B Selective Agar Base	Low risk	04/07/2018
DCM	M1966	HiCrome™ Strep B Selective Agar Base, Modified	Low risk	20/12/2012
DCM	MCD1840	HiCrome™ Strep B Selective HiCynth™ Agar Base	Low risk	04/07/2018
DCM	M1600	HiCrome™ Universal Differential Medium	Low risk	20/12/2012
DCM	MCD1418	HiCrome™ UTI HiCynth™ Agar, Modified	Low risk	25/08/2016
DCM	M1353	HiCrome™ UTI Agar	Low risk	20/12/2012
DCM	M1418	HiCrome™ UTI Agar, Modified	Low risk	20/12/2012
DCM	MV1353	HiCrome™ UTI HiVeg™ Agar	Low risk	20/12/2012
DCM	MV1418	HiCrome™ UTI HiVeg™ Agar, Modified	Low risk	20/12/2012
DCM	M1505	HiCrome™ UTI Selective Agar	Low risk	20/12/2012
DCM	MV1505	HiCrome™ UTI Selective HiVeg™ Agar	Low risk	20/12/2012
DCM	M1682	HiCrome™ Vibrio Agar	Low risk	22/04/2019
DCM	MCD1682	HiCrome™ Vibrio HiCynth™ Agar	Low risk	10/11/2020
DCM	M1830	HiCrome™ VRE Agar Base	Low risk	20/12/2012
DCM	M1925	HiCrome™ VRE Agar Base, Modified	Low risk	20/12/2012
DCM	M2025	HiCrome™ Yersinia Agar Base	Low risk	25/08/2016
DCM	M1951	HiCrome™ M-Coliform Differential Agar Base	Low risk	22/04/2019
DCM	M2048	HiFast™ Listeria Enrichment Broth Base	Low risk	10/11/2020
DCM	M1469	HiFluoro Pseudomonas Agar Base	Low risk	20/12/2012
DCM	MV1469	HiFluoro Pseudomonas HiVeg™ Agar Base	Low risk	20/12/2012
DCM	M2126	HiMRSA™ Confirmation Agar Base	Low risk	18/06/2021
DCM	M1218	High Salt Nutrient Agar	Low risk	20/12/2012
DCM	M1219	High Salt Peptone Yeast Extract Agar	Low risk	20/12/2012
DCM	M1054	Hippurate Hydrolysis Broth	Low risk	20/12/2012
DCM	M485	Hi-Sensitivity Test Agar	Low risk	20/12/2012
DCM	M486	Hi-Sensitivity Test Broth	Low risk	20/12/2012
DCM	MV485	Hi-Sensitivity Test HiVeg™ Agar	Low risk	20/12/2012
DCM	MV486	Hi-Sensitivity Test HiVeg™ Broth	Low risk	20/12/2012

DCM	M485A	HiSitest Agar	Low risk	20/12/2012
DCM	MV806	HiVeg™ Extract Agar	Low risk	20/12/2012
DCM	MV807	HiVeg™ Extract Broth	Low risk	20/12/2012
DCM	MV028	HiVeg™ Peptone Water	Low risk	20/12/2012
DCM	M806	HM Peptone B Agar	Low risk	20/12/2012
DCM	M807	HM Peptone B Broth	Low risk	20/12/2012
DCM	M924	Horie Arabinose Ethyl Violet Broth	Low risk	20/12/2012
DCM	M5385	Horse Blood agar	Low risk	30/10/2018
DCM	M1425	Hottinger Broth	Low risk	20/12/2012
DCM	MV015	Hoyle HiVeg™ Medium Base	Low risk	20/12/2012
DCM	M015	Hoyle Medium Base	Low risk	20/12/2012
DCM	MV871	Hugh Leifson Glucose HiVeg™ Medium	Low risk	20/12/2012
DCM	M871	Hugh Leifson Glucose Medium	Low risk	20/12/2012
DCM	MV826	Hugh Leifson HiVeg™ Medium	Low risk	20/12/2012
DCM	M826	Hugh Leifson Medium	Low risk	20/12/2012
DCM	M826S	Hugh Leifson Medium	Low risk	20/12/2012
DCM	MV364	Indole Nitrate HiVeg™ Medium (Tryptone Nitrate HiVeg™ Medium)	Low risk	20/12/2012
DCM	M364	Indole Nitrate Medium (Tryptone Nitrate Medium)	Low risk	20/12/2012
DCM	M574	Inositol Brilliant Green Bile Agar (Plesiomonas Differential Agar)	Low risk	20/12/2012
DCM	MV574	Inositol Brilliant Green HiVeg™ Agar (Plesiomonas Differential HiVeg™ Agar)	Low risk	20/12/2012
DCM	M1222	Karmali Campylobacter Agar Base	Low risk	10/11/2020
DCM	M248	KF Streptococcal Agar Base	Low risk	22/04/2019
DCM	M249	KF Streptococcal Broth Base	Low risk	20/12/2012
DCM	MV248	KF Streptococcal HiVeg Agar Base	Low risk	22/04/2019
DCM	MV249	KF Streptococcal HiVeg™ Broth Base	Low risk	20/12/2012
DCM	M1007	KF Streptococcus Agar Base w/ BCP	Low risk	20/12/2012
DCM	M1021	KF Streptococcus Broth Base w/ BCP	Low risk	20/12/2012
DCM	MV1021	KF Streptococcus HiVeg™ Broth Base w/ BCP	Low risk	20/12/2012
DCM	M1232	Kimmig Fungi Agar Base	Low risk	20/12/2012
DCM	MV1232	Kimmig Fungi HiVeg™ Agar Base	Low risk	20/12/2012
DCM	M1543	King's Medium A Base	Low risk	20/12/2012
DCM	M1235	King's OF Medium Base	Low risk	20/12/2012
DCM	MV1235	Kings OF Medium Base, HiVeg™	Low risk	20/12/2012
DCM	M2040	Kirchner Medium Base	Low risk	28/04/2017
DCM	M161	Kirchner Medium Base, Modified	Low risk	20/12/2012
DCM	M078	Kligler Iron Agar	Low risk	20/12/2012
DCM	M078I	Kligler Iron Agar	Low risk	20/12/2012
DCM	M078A	Kligler Iron Agar, Modified	Low risk	20/12/2012
DCM	MCD078	Kligler Iron HiCynth™ Agar	Low risk	12/08/2015

DCM	MV078	Kligler Iron HiVeg™ Agar	Low risk	20/12/2012
DCM	MV142	Kohn Two Tube HiVeg™ Medium No.1 Base	Low risk	20/12/2012
DCM	MV802	Kohn Two Tube HiVeg™ Medium No.2	Low risk	20/12/2012
DCM	M142	Kohn Two Tube Medium No.1 Base	Low risk	20/12/2012
DCM	M802	Kohn Two Tube Medium No.2	Low risk	20/12/2012
DCM	M069	Koser Citrate Medium	Low risk	20/12/2012
DCM	MV171	Kracke Blood Culture HiVeg™ Medium	Low risk	20/12/2012
DCM	M171	Kracke Blood Culture Medium	Low risk	20/12/2012
DCM	M305	Kupferberg Trichomonas Broth Base (Trichomonas Broth Base, Kupferberg)	Low risk	20/12/2012
DCM	MV305	Kupferberg Trichomonas HiVeg™ Broth Base (Trichomonas HiVeg™ Broth Base, Kupferberg)	Low risk	20/12/2012
DCM	M928	L Broth	Low risk	20/12/2012
DCM	M1312	L Broth, Modified	Low risk	20/12/2012
DCM	M162R	L J Medium Base, Modified (Lowenstein Jensen Medium Base, Modified)	Low risk	25/08/2016
DCM	M1552	L. mono Confirmatory Agar Base	Low risk	20/12/2012
DCM	MV1552	L. mono Confirmatory HiVeg™ Agar Base	Low risk	20/12/2012
DCM	M742	L.D. Agar	Low risk	20/12/2012
DCM	M744	L.D. Egg Yolk Agar Base	Low risk	20/12/2012
DCM	M743	L.D. Esculin Agar	Low risk	20/12/2012
DCM	MV743	L.D. Esculin HiVeg™ Agar	Low risk	20/12/2012
DCM	MV742	L.D. HiVeg™ Agar	Low risk	20/12/2012
DCM	M1540	L.mono Differential Agar Base	Low risk	22/04/2019
DCM	M1540I	HiCrome™ Listeria Ottaviani-Agosti Agar Base	Low risk	10/11/2020
DCM	M1540IR	L.mono Differential Agar Base	Low risk	10/11/2020
DCM	MCD1540	L.mono Differential HiCynth™ Agar Base	Low risk	22/04/2019
DCM	MV1540	L.mono Differential HiVeg™ Agar Base	Low risk	22/04/2019
DCM	M926	Lactic Streak Agar (Reddy's Differential Agar, Modified)	Low risk	20/12/2012
DCM	MV926	Lactic Streak HiVeg™ Agar	Low risk	20/12/2012
DCM	MV368	Lactobacilli HiVeg™ Broth (Elliker HiVeg™ Broth)	Low risk	20/12/2012
DCM	M927	Lactobacillus Bulgaricus Agar Base	Low risk	20/12/2012
DCM	MV927	Lactobacillus Bulgaricus HiVeg™ Agar Base	Low risk	20/12/2012
DCM	M641	Lactobacillus MRS Agar (MRS Agar)	Low risk	20/12/2012
DCM	M641I	Lactobacillus MRS Agar (MRS Agar)	Low risk	20/12/2012
DCM	M369	Lactobacillus MRS Broth (MRS Broth)	Low risk	20/12/2012
DCM	MV641	Lactobacillus MRS HiVeg™ Agar (MRS HiVeg™ Agar)	Low risk	20/12/2012
DCM	MV369	Lactobacillus MRS HiVeg™ Broth (MRS HiVeg™ Broth)	Low risk	20/12/2012
DCM	M1165	Lactobacillus Selection Bile Agar Base (LBS Bile Agar)	Low risk	20/12/2012
DCM	M1081	Lactose Blue Agar (B.T.B. Lactose Agar, Modified)	Low risk	20/12/2012
DCM	MV1081	Lactose Blue HiVeg™ Agar (B.T.B. Lactose HiVeg™ Agar, Modified)	Low risk	20/12/2012

DCM	M1003	Lactose Broth	Low risk	22/04/2019
DCM	MV1003	Lactose HiVeg™ Broth	Low risk	22/04/2019
DCM	M1047	Lactose Lecithin Agar	Low risk	04/07/2018
DCM	M080	Lauryl Sulphate Broth (Lauryl Tryptose Broth)	Low risk	22/04/2019
DCM	MV080	Lauryl SulphateHiVeg™ Broth (Lauryl Tryptose HiVeg™ Broth)	Low risk	22/04/2019
DCM	M180	Lead Acetate Agar	Low risk	10/11/2020
DCM	M1839	Leeds Acinetobacter Agar Base	Low risk	20/12/2012
DCM	M1938R	Leeds Acinetobacter Agar Base (HiCrome™ Acinetobacter Agar Base)	Low risk	25/08/2016
DCM	M1845	Legionella Agar Base w/o Charcoal	Low risk	10/11/2020
DCM	M1380	Leifson Agar	Low risk	20/12/2012
DCM	MV1380	Leifson HiVeg™ Agar	Low risk	20/12/2012
DCM	M1138	Leifson's Deoxycholate Agar, Modified	Low risk	20/12/2012
DCM	MV1138	Leifson's Deoxycholate HiVeg™ Agar, Modified	Low risk	20/12/2012
DCM	MV239	Leptospira HiVeg™ Medium Base, Fletcher (Fletcher Leptospira HiVeg™ Medium Base)	Low risk	20/12/2012
DCM	MV457	Leptospira HiVeg™ Medium Base, Korthof, Modified	Low risk	20/12/2012
DCM	M1009	Leptospira Medium Base	Low risk	20/12/2012
DCM	M239	Leptospira Medium Base, Fletcher (Fletcher Leptospira Medium Base)	Low risk	20/12/2012
DCM	M457	Leptospira Medium Base, Korthof, Modified	Low risk	20/12/2012
DCM	MV472	Levinthal's HiVeg™ Medium Base	Low risk	20/12/2012
DCM	M472	Levinthal's Medium Base	Low risk	20/12/2012
DCM	M374	LI Agar	Low risk	20/12/2012
DCM	MV374	LI Agar, HiVeg™	Low risk	20/12/2012
DCM	M153	LI Broth	Low risk	20/12/2012
DCM	MV153	LI Broth, HiVeg™	Low risk	20/12/2012
DCM	M627	Lipovitellin Salt Mannitol Agar Base	Low risk	20/12/2012
DCM	M817	Liquoid Broth	Low risk	20/12/2012
DCM	MV817	Liquoid HiVeg™ Broth	Low risk	20/12/2012
DCM	M569	Listeria Enrichment Broth (Twin Pack)	Low risk	20/12/2012
DCM	MV569	Listeria Enrichment HiVeg™ Broth (Twin Pack)	Low risk	20/12/2012
DCM	MV890A	Listeria Enrichment HiVeg™ Medium Base (UVM)	Low risk	20/12/2012
DCM	M890A	Listeria Enrichment Medium Base (UVM)	Low risk	20/12/2012
DCM	M1064	Listeria Identification Agar Base (PALCAM)	Low risk	22/04/2019
DCM	M1090	Listeria Identification Broth Base (PALCAM)	Low risk	22/04/2019
DCM	MV1064	Listeria Identification HiVeg Agar Base (PALCAM)	Low risk	22/04/2019
DCM	MV1090	Listeria Identification HiVeg Broth Base (PALCAM)	Low risk	22/04/2019
DCM	MCD1145	Listeria Oxford HiCynth™ Medium Base	Low risk	25/08/2016
DCM	MV1145	Listeria Oxford HiVeg™ Medium Base	Low risk	20/12/2012
DCM	M1145R	Listeria Oxford Medium Base	Low risk	25/08/2016

DCM	M1145	Listeria Oxford Medium Base	Low risk	20/12/2012
DCM	M1781	Listeria Oxford Medium Base, Modified	Low risk	20/12/2012
DCM	M567	Listeria Selective Agar (Twin Pack)	Low risk	20/12/2012
DCM	M1474	Listeria Selective Agar Base	Low risk	20/12/2012
DCM	M889	Listeria Selective Broth Base	Low risk	20/12/2012
DCM	M1865	Listeria Selective Enrichment Broth	Low risk	22/04/2019
DCM	MV567	Listeria Selective HiVeg™ Agar (Twin Pack)	Low risk	20/12/2012
DCM	MV889	Listeria Selective HiVeg™ Broth Base	Low risk	20/12/2012
DCM	M507	Litmus Lactose Bile Salt Agar (LLBSA)	Low risk	10/11/2020
DCM	MV507	Litmus Lactose HiVeg™ Agar	Low risk	10/11/2020
DCM	M373	Littman Bile Agar Base	Low risk	20/12/2012
DCM	M663	Littman Bile Broth Base	Low risk	20/12/2012
DCM	MV373	Littman HiVeg™ Agar Base	Low risk	20/12/2012
DCM	MV663	Littman HiVeg™ Broth Base	Low risk	20/12/2012
DCM	M1001	LM Agar	Low risk	20/12/2012
DCM	M1934	LM Agar, Modified	Low risk	20/12/2012
DCM	MV537	Loeffler HiVeg™ Medium Base	Low risk	20/12/2012
DCM	M537	Loeffler Medium Base	Low risk	20/12/2012
DCM	M1189	Loeffler Serum Medium Base	Low risk	20/12/2012
DCM	MM162	Lowenstein - Jensen Medium (L.J. Medium) (Twin Pack)	Low risk	20/12/2012
DCM	M162R	Lowenstein Jensen Medium Base, Modified (L J Medium Base, Modified)	Low risk	25/08/2016
DCM	M162	Lowenstein Jensen Medium Base (L.J. Medium)	Low risk	20/12/2012
DCM	M1542	Lowenstein Jensen Medium Base w/o Starch	Low risk	20/12/2012
DCM	M2032	Lowenstein Jensen Medium Base, Modified	Low risk	25/08/2016
DCM	M176	LV Agar (Liver Veal Agar)	Low risk	10/11/2020
DCM	M1977	Lysine Indole Motility Medium, Modified	Low risk	10/11/2020
DCM	MH081	MacConkey Agar	Low risk	22/04/2019
DCM	M1024	MacConkey Agar Base	Low risk	20/12/2012
DCM	M1819	MacConkey Agar II w/o CV	Low risk	20/12/2012
DCM	M008E	MacConkey Agar Medium	Low risk	20/12/2012
DCM	M081	MacConkey Agar w/ 0.15% Bile Salts, CV and NaCl	Low risk	20/12/2012
DCM	M061	MacConkey Agar w/ Bromo Thymol Blue	Low risk	20/12/2012
DCM	M1582	MacConkey Agar w/ CV and w/o NaCl	Low risk	20/12/2012
DCM	M081A	MacConkey Agar w/ CV, NaCl, and 0.15% Bile Salts	Low risk	20/12/2012
DCM	M008	MacConkey Agar w/o CV w/ 0.15% Bile Salts	Low risk	20/12/2012
DCM	M082A	MacConkey Agar w/o CV, NaCl w/ 0.5% Bile Salts	Low risk	20/12/2012
DCM	M082	MacConkey Agar w/o CV, NaCl w/ 0.5% Sodium Taurocholate	Low risk	20/12/2012
DCM	M008A	MacConkey Agar w/o CV, w/ 0.5% Bile Salts	Low risk	20/12/2012
DCM	M008B	MacConkey Agar w/o CV, w/ 1.2% Agar	Low risk	20/12/2012

DCM	M1785	MacConkey Agar w/o CV, w/0.5% Sodium Taurocholate	Low risk	20/12/2012
DCM	M1702	MacConkey Agar, RS	Low risk	20/12/2012
DCM	MH083	MacConkey Broth	Low risk	22/04/2019
DCM	M083	MacConkey Broth Purple w/BCP	Low risk	22/04/2019
DCM	MCD081	MacConkey HiCynth™ Agar w/ 0.15% Bile Salts	Low risk	25/08/2016
DCM	MCD082	MacConkey HiCynth™ Agar w/o CV, NaCl	Low risk	25/08/2016
DCM	MV1024	MacConkey HiVeg™ Agar Base	Low risk	20/12/2012
DCM	MV061	MacConkey HiVeg™ Agar w/ Bromo Thymol Blue	Low risk	20/12/2012
DCM	MV081	MacConkey HiVeg™ Agar w/ CV, NaCl, 0.003% NR and 1.5% Agar	Low risk	20/12/2012
DCM	MV081A	MacConkey HiVeg™ Agar w/ CV, NaCl, 0.005% NR and 1.5% Agar	Low risk	20/12/2012
DCM	MV082	MacConkey HiVeg™ Agar w/o CV and NaCl, w/ 0.004% NR and 2.0% Agar	Low risk	20/12/2012
DCM	MV082A	MacConkey HiVeg™ Agar w/o CV and NaCl, w/ 0.0075% NR and 1.2% Agar	Low risk	20/12/2012
DCM	MV008B	MacConkey HiVeg™ Agar w/o CV, w/ 0.003% NR and 1.2% Agar	Low risk	20/12/2012
DCM	MV008	MacConkey HiVeg™ Agar w/o CV, w/ 0.003% NR and 1.5% Agar	Low risk	20/12/2012
DCM	MV008A	MacConkey HiVeg™ Agar w/o CV, w/ 0.0075% NR and 1.2% Agar	Low risk	20/12/2012
DCM	MV083	MacConkey HiVeg™ Broth Purple w/ BCP	Low risk	22/04/2019
DCM	M298	MacConkey Sorbitol Agar (Sorbitol Agar)	Low risk	20/12/2012
DCM	M298I	MacConkey Sorbitol Agar Base	Low risk	20/12/2012
DCM	M1727R	MacConkey Sorbitol Agar Base (w/ Rhamnose)	Low risk	25/08/2016
DCM	M1727	MacConkey Sorbitol Agar Base w/ Rhamnose	Low risk	20/12/2012
DCM	MCD298	MacConkey Sorbitol HiCynth™ Agar (Sorbitol HiCynth™ Agar)	Low risk	28/04/2017
DCM	MV298	MacConkey Sorbitol HiVeg™ Agar (Sorbitol HiVeg™ Agar)	Low risk	20/12/2012
DCM	M2074	MacConkey Sorbitol Rhamnose Selective Agar Base	Low risk	16/12/2017
DCM	M382	Malonate Broth	Low risk	25/08/2016
DCM	M137	Malt Extract Agar Base (w/ Mycological Peptone)	Low risk	20/12/2012
DCM	M995	Malt Extract Agar Base, Modified as per Thom and Church	Low risk	20/12/2012
DCM	M255	Malt Extract Broth Base	Low risk	20/12/2012
DCM	M1128	Malt Extract Broth, Modified as per Thom and Church	Low risk	20/12/2012
DCM	MV137	Malt Extract HiVeg™ Agar Base	Low risk	20/12/2012
DCM	MV995	Malt Extract HiVeg™ Agar Base, Modified	Low risk	20/12/2012
DCM	MV255	Malt Extract HiVeg™ Broth Base	Low risk	20/12/2012
DCM	M1967	Malt Yeast Agar	Low risk	20/12/2012
DCM	M1624	Mannitol Agar w/Prilion	Low risk	20/12/2012
DCM	M1071	Mannitol Lysine Agar	Low risk	20/12/2012
DCM	MCD1071	Mannitol Lysine HiCynth™ Agar	Low risk	25/08/2016
DCM	M1320	Mannitol Motility Nitrate Medium	Low risk	20/12/2012
DCM	MV770	Mannitol Motility Test HiVeg™ Medium	Low risk	20/12/2012
DCM	M770	Mannitol Motility Test Medium	Low risk	20/12/2012
DCM	MH118	Mannitol Salt Agar	Low risk	22/04/2019

DCM	M118	Mannitol Salt Agar Base	Low risk	20/12/2012
DCM	M383	Mannitol Salt Broth	Low risk	20/12/2012
DCM	MCD118	Mannitol Salt HiCynth™ Agar Base	Low risk	12/08/2015
DCM	MV118	Mannitol Salt HiVeg™ Agar Base	Low risk	20/12/2012
DCM	MV383	Mannitol Salt HiVeg™ Broth	Low risk	20/12/2012
DCM	M1534	Mannitol Selenite Broth (Selenite Mannitol Broth) (Twin Pack)	Low risk	20/12/2012
DCM	M1537	Mannitol Selenite Broth w/Brilliant Green (Twin Pack)	Low risk	04/07/2018
DCM	MV379	Marine Oxidation Fermentation HiVeg™ Medium	Low risk	20/12/2012
DCM	M379	Marine Oxidation Fermentation Medium	Low risk	20/12/2012
DCM	M2085	Martin Lewis Agar Base	Low risk	22/04/2019
DCM	M1030	Maximum Recovery Diluent	Low risk	22/04/2019
DCM	MV1030	Maximum Recovery Diluent HiVeg™	Low risk	22/04/2019
DCM	M386	McBride Listeria Agar Base	Low risk	20/12/2012
DCM	MV386	McBride Listeria HiVeg™ Agar Base	Low risk	20/12/2012
DCM	M1354	M-CP Agar Base	Low risk	10/11/2020
DCM	MV1354	M-CP HiVeg™ Agar Base	Low risk	10/11/2020
DCM	M1426	M-E.coli Broth	Low risk	22/04/2019
DCM	M1594	MeReSa Agar Base	Low risk	20/12/2012
DCM	M1974R	MeReSa Agar Base (HiCrome™ Rapid MRSA Agar)	Low risk	25/08/2016
DCM	M1812	M-FC Basal Medium	Low risk	10/11/2020
DCM	M199	Middlebrook 7H10 Agar Base	Low risk	20/12/2012
DCM	M196	Middlebrook 7H10 Agar Base, Special	Low risk	20/12/2012
DCM	M511	Middlebrook 7H11 Agar Base	Low risk	20/12/2012
DCM	M511A	Middlebrook 7H11 Agar Base w/o Malachite Green	Low risk	20/12/2012
DCM	MV511	Middlebrook 7H11 HiVeg™ Agar Base	Low risk	20/12/2012
DCM	M197	Middlebrook 7H9 Agar Base	Low risk	20/12/2012
DCM	M198	Middlebrook 7H9 Broth Base	Low risk	20/12/2012
DCM	M259	Mitis Salivarius Agar Base	Low risk	20/12/2012
DCM	MV259	Mitis Salivarius HiVeg™ Agar Base	Low risk	20/12/2012
DCM	M5319	Modified B.Q. Vaccine Medium	Low risk	28/04/2017
DCM	M1150	Modified Bile Esculin Azide Agar	Low risk	20/12/2012
DCM	M892	Modified Buffered Charcoal Agar Base	Low risk	20/12/2012
DCM	MV892	Modified Buffered Charcoal HiVeg™ Agar Base	Low risk	20/12/2012
DCM	M1660	Modified Cary-Blair Medium	Low risk	20/12/2012
DCM	MV460	Modified CPLM HiVeg™ Medium Base (Trichomonas Modified CPLM HiVeg™ Medium Base)	Low risk	20/12/2012
DCM	M460	Modified CPLM Medium Base (Trichomonas Modified CPLM Medium Base)	Low risk	20/12/2012
DCM	M1170	Modified Czapek Dox Agar	Low risk	20/12/2012
DCM	M1285	Modified EC Broth Base	Low risk	20/12/2012
DCM	M1445	Modified Lactobacillus Agar	Low risk	20/12/2012

DCM	M1643	Modified Lauryl Sulphate Tryptose Broth Base	Low risk	20/12/2012
DCM	M1457R	Modified Listeria Lecithinase Agar Base	Low risk	25/08/2016
DCM	M1897	Modified Listeria Oxford Agar Base	Low risk	25/11/2017
DCM	M891	Modified McBride Listeria Agar Base	Low risk	20/12/2012
DCM	MV891	Modified McBride Listeria HiVeg™™ Agar Base	Low risk	20/12/2012
DCM	M1139	Modified MYP Agar Base	Low risk	20/12/2012
DCM	MV1139	Modified MYP HiVeg™™ Agar Base	Low risk	20/12/2012
DCM	M1606	Modified Protease Agar	Low risk	20/12/2012
DCM	M1681	Modified Sabourauds Chloramphenicol Agar	Low risk	20/12/2012
DCM	M1068	Modified Salt Broth	Low risk	20/12/2012
DCM	M2049	Modified Shieh Agar (LMG Medium 215)	Low risk	28/04/2017
DCM	M1286I	Modified Soyabean Bile Broth Base	Low risk	22/04/2019
DCM	M795	Modified Thayer Martin Medium Base (w/o Supplement)	Low risk	20/12/2012
DCM	M393	Moeller Decarboxylase Broth Base (Decarboxylase Broth Base, Moeller)	Low risk	25/08/2016
DCM	MCD393	Moeller Decarboxylase HiCynth™™ Broth Bas	Low risk	25/08/2016
DCM	M246	Mold Inhibitory Agar, Ulrich	Low risk	20/12/2012
DCM	M474	Monsur Medium Base	Low risk	20/12/2012
DCM	M1927	MRS Agar w/ Low pH	Low risk	10/11/2020
DCM	M1864	MSM Broth Base	Low risk	20/12/2012
DCM	M173	Mueller Hinton Agar	Low risk	20/12/2012
DCM	M1825	Mueller Hinton Agar 2% Glucose w/ Methylene blue	Low risk	20/12/2012
DCM	M1825R	Mueller Hinton Agar Modified (As per CLSI)	Low risk	25/08/2016
DCM	M1084	Mueller Hinton Agar No. 2	Low risk	20/12/2012
DCM	M5389	Mueller Hinton Agar w/ 2% NaCL	Low risk	30/10/2018
DCM	M391	Mueller Hinton Broth	Low risk	20/12/2012
DCM	M1657	Mueller Hinton Broth No. 2 Control Cations	Low risk	20/12/2012
DCM	MV173	Mueller Hinton HiVeg™™ Agar	Low risk	20/12/2012
DCM	MV1084	Mueller Hinton HiVeg™™ Agar No. 2	Low risk	20/12/2012
DCM	MV391	Mueller Hinton HiVeg™™ Broth	Low risk	20/12/2012
DCM	M1202	Mueller Tellurite Agar Base	Low risk	20/12/2012
DCM	M1373	MUG EC O157 Agar	Low risk	16/12/2017
DCM	M1429	MUG EC O157 Agar, Modified	Low risk	20/12/2012
DCM	M1080	MUG MacConkey Agar	Low risk	20/12/2012
DCM	MV1080	MUG MacConkey HiVeg™™ Agar	Low risk	20/12/2012
DCM	M1205	MUG Sorbitol Agar	Low risk	20/12/2012
DCM	M977	Mutans-Sanguis Agar	Low risk	20/12/2012
DCM	M094	Mycological Agar	Low risk	20/12/2012
DCM	M095	Mycological Agar w/ Low pH	Low risk	20/12/2012
DCM	M1422	Mycological Agar, Modified	Low risk	20/12/2012

DCM	M264	Mycological Broth	Low risk	20/12/2012
DCM	M265	Mycological Broth w/ Low pH	Low risk	20/12/2012
DCM	M266	Mycoplasma Agar Base (PPLO Agar Base)	Low risk	20/12/2012
DCM	M268	Mycoplasma Broth Base w/ CV (PPLO Broth Base w/ CV)	Low risk	20/12/2012
DCM	M267	Mycoplasma Broth Base w/o CV (PPLO Broth Base w/o CV)	Low risk	20/12/2012
DCM	M1498	Mycoplasma Cultivation Broth Base	Low risk	20/12/2012
DCM	MV266	Mycoplasma HiVeg™ Agar Base (PPLO HiVeg™ Agar Base)	Low risk	20/12/2012
DCM	MV268	Mycoplasma HiVeg™ Broth Base w/ CV (PPLO HiVeg™ Broth Base w/ CV)	Low risk	20/12/2012
DCM	MV267	Mycoplasma HiVeg™ Broth Base w/o CV (PPLO HiVeg™ Broth Base w/o CV)	Low risk	20/12/2012
DCM	MV624	Mycoplasma Synoviae HiVeg™ Medium Base	Low risk	20/12/2012
DCM	M624	Mycoplasma Synoviae Medium Base	Low risk	20/12/2012
DCM	M1374	Mycoplasma Urogenital Broth Base (Urogenital Mycoplasma Broth Base)	Low risk	20/12/2012
DCM	M636	MYP Agar Base (Phenol Red Egg Yolk Polymyxin Agar Base)	Low risk	20/12/2012
DCM	MCD636	MYP HiCynth™ Agar Base (Phenol Red Egg Yolk Polymyxin HiCynth™ Agar Base)	Low risk	28/04/2017
DCM	MV636	MYP HiVeg™ Agar Base (Phenol Red Polymyxin HiVeg™ Agar Base)	Low risk	20/12/2012
DCM	MV217	Nickerson HiVeg™ Medium (Bi.G.G.Y. HiVeg™ Agar)	Low risk	20/12/2012
DCM	M217	Nickerson Medium (Bi.G.G.Y. Agar)	Low risk	20/12/2012
DCM	M072	Nitrate Agar	Low risk	10/11/2020
DCM	MV072	Nitrate HiVeg™ Agar	Low risk	10/11/2020
DCM	M681	NNN Modified Medium (Twin Pack)	Low risk	10/11/2020
DCM	M001	Nutrient Agar	Low risk	20/12/2012
DCM	M001A	Nutrient Agar	Low risk	20/12/2012
DCM	M087	Nutrient Agar 1.5%	Low risk	20/12/2012
DCM	M1269	Nutrient Agar No.2	Low risk	20/12/2012
DCM	M012	Nutrient Agar w/ 1% Peptone	Low risk	20/12/2012
DCM	M561	Nutrient Agar, pH 6.8	Low risk	20/12/2012
DCM	M002	Nutrient Broth	Low risk	20/12/2012
DCM	M1362	Nutrient Broth No. 2	Low risk	20/12/2012
DCM	M1902	Nutrient Broth No.3	Low risk	20/12/2012
DCM	M060	Nutrient Gelatin	Low risk	20/12/2012
DCM	MCD001	Nutrient HiCynth™ Agar	Low risk	12/08/2015
DCM	MCD002	Nutrient HiCynth™ Broth	Low risk	12/08/2015
DCM	MV001	Nutrient HiVeg™ Agar	Low risk	20/12/2012
DCM	MV087	Nutrient HiVeg™ Agar 1.5%	Low risk	20/12/2012
DCM	MV1269	Nutrient HiVeg™ Agar No.2	Low risk	20/12/2012
DCM	MV012	Nutrient HiVeg™ Agar w/ 1% HiVeg™ Peptone	Low risk	20/12/2012
DCM	MV561	Nutrient HiVeg™ Agar, pH 6.8	Low risk	20/12/2012

DCM	MV002	Nutrient HiVeg™ Broth	Low risk	20/12/2012
DCM	M1348	NYC Agar Base	Low risk	20/12/2012
DCM	MCD395	OF Basal HiCynth™ Medium	Low risk	25/08/2016
DCM	MV395	OF Basal HiVeg™ Medium	Low risk	20/12/2012
DCM	M395	OF Basal Medium	Low risk	20/12/2012
DCM	M1811	OFBBL Agar Base (Oxidation Fermentation Polymyxin Bacitracin Lactose Agar Base)	Low risk	20/12/2012
DCM	M1930	ONPG BROTH	Low risk	20/12/2012
DCM	M933	Orange Serum Agar	Low risk	22/04/2019
DCM	MV933	Orange SerumHiVeg™ Agar	Low risk	22/04/2019
DCM	M1454	Oxacillin Resistance Screening Agar Base	Low risk	20/12/2012
DCM	M1390	Pagano Levin Base	Low risk	20/12/2012
DCM	M867	Peizer TB Medium Base	Low risk	20/12/2012
DCM	M1207	Pepted M Broth	Low risk	20/12/2012
DCM	M028	Peptone Water	Low risk	20/12/2012
DCM	MCD837	Perfringens HiCynth™ Agar Base (T.S.C/S.F.P HiCynth™ Agar Base)	Low risk	28/04/2017
DCM	MV837	Perfringens HiVeg™ Agar Base (T.S.C/S.F.P HiCynth™ Agar Base)	Low risk	28/04/2017
DCM	M269A	Phenylethanol Agar Base	Low risk	20/12/2012
DCM	M269	Phenylethyl Alcohol Agar Base	Low risk	20/12/2012
DCM	MV269	Phenylethyl Alcohol HiVeg™ Agar Base	Low risk	20/12/2012
DCM	M540	Phenylethyl Blood Agar Base (Anaerobic)	Low risk	20/12/2012
DCM	M1866	Phosphate Buffered Saline (PBS) pH 7.4	Low risk	22/04/2019
DCM	M519	Pike Streptococcal Broth Base	Low risk	20/12/2012
DCM	MV519	Pike Streptococcal HiVeg™ Broth Base	Low risk	20/12/2012
DCM	M282	PKU Test Agar Base	Low risk	20/12/2012
DCM	M398	PKU Test Agar w/ Thienylalanine	Low risk	20/12/2012
DCM	M091	Plate Count Agar (Standard Methods Agar)	Low risk	28/04/2017
DCM	MCD091	Plate Count HiCynth™ Agar (Standard Methods HiCynth™ Agar)	Low risk	28/04/2017
DCM	MV091	Plate Count HiVeg™ Agar (Standard Methods HiVeg™ Agar)	Low risk	28/04/2017
DCM	M574	Plesiomonas Differential Agar (Inositol Brilliant Green Bile Agar)	Low risk	20/12/2012
DCM	MV574	Plesiomonas Differential HiVeg™ Agar (Inositol Brilliant Green HiVeg™ Agar)	Low risk	20/12/2012
DCM	M1446	PLET Agar Base	Low risk	20/12/2012
DCM	M1451	PLET Agar Base, Modified	Low risk	20/12/2012
DCM	M835	PNY Medium	Low risk	20/12/2012
DCM	MH096	Potato Dextrose Agar	Low risk	22/04/2019
DCM	M096	Potato Dextrose Agar	Low risk	22/04/2019
DCM	M5391	PPLO Agar Base	Low risk	30/10/2018
DCM	M1586	PPLO Modified Broth Base w/o CV	Low risk	20/12/2012

DCM	M899	Preston Enrichment Broth Base (Campylobacter Enrichment Broth Base)	Low risk	20/12/2012
DCM	MV899	Preston Enrichment HiVeg™ Broth Base (Campylobacter Enrichment HiVeg™ Broth Base)	Low risk	20/12/2012
DCM	M956	Propionibacter Isolation Agar Base	Low risk	20/12/2012
DCM	M1697	Proskauer Beck medium	Low risk	20/12/2012
DCM	M085	Pseudomonas Agar Base	Low risk	22/04/2019
DCM	MV085	Pseudomonas HiVeg Agar Base	Low risk	22/04/2019
DCM	M406	Pseudomonas Isolation Agar Base	Low risk	20/12/2012
DCM	MCD406	Pseudomonas Isolation HiCynth™ Agar	Low risk	25/08/2016
DCM	MV406	Pseudomonas Isolation HiVeg™ Agar Base	Low risk	20/12/2012
DCM	M1489	PYR Agar	Low risk	10/11/2020
DCM	M1743	R2A Agar, Modified	Low risk	22/04/2019
DCM	MV1078	RajHans HiVeg™ Medium (Salmonella Differential HiVeg™ Agar) (Twin Pack)	Low risk	20/12/2012
DCM	M1078	RajHans Medium (Salmonella Differential Agar) (Twin Pack)	Low risk	20/12/2012
DCM	M1453A	Rapid HiColiform Broth w/Tryptophan	Low risk	22/04/2019
DCM	MCD1465	Rapid HiColiform HiCynth™ Agar	Low risk	10/11/2020
DCM	M1465	Rapid HiColiform™ Agar	Low risk	10/11/2020
DCM	MV1465	Rapid HiColiform™ HiVeg™ Agar	Low risk	10/11/2020
DCM	MCD1491	Rappaport Vassiliadis HiCynth™ Broth	Low risk	12/08/2015
DCM	M1530	Rappaport Vassiliadis R10 Medium	Low risk	20/12/2012
DCM	MH1491	Rappaport Vassiliadis Salmonella Enrichment Broth	Low risk	22/04/2019
DCM	M1491	Rappaport Vassiliadis Soya Broth (RVS Broth)	Low risk	20/12/2012
DCM	M1448	Rappaport Vassiliadis Soyabean Meal Broth (RVSM)	Low risk	20/12/2012
DCM	MH443	Reinforced Medium for Clostridia	Low risk	22/04/2019
DCM	M1626	Reuter's Sorbic Acid Agar Base	Low risk	20/12/2012
DCM	M459	Robinson Medium for Entamoeba (Twin Pack)	Low risk	20/12/2012
DCM	M149	Robinson's Cooked M Medium (R.C. Medium)	Low risk	16/12/2017
DCM	M1899	Rogosa Agar, Modified	Low risk	20/12/2012
DCM	M130	Rogosa SL Agar	Low risk	20/12/2012
DCM	M958	Rogosa SL Agar w/ 0.15% Bile	Low risk	20/12/2012
DCM	M407	Rogosa SL Broth	Low risk	20/12/2012
DCM	MCD130	Rogosa SL HiCynth™ Agar	Low risk	28/04/2017
DCM	MV130	Rogosa SL HiVeg™ Agar	Low risk	20/12/2012
DCM	MV407	Rogosa SL HiVeg™ Broth	Low risk	20/12/2012
DCM	M842	Rose Bengal Agar Base	Low risk	20/12/2012
DCM	M640	Rose Bengal Chloramphenicol Agar	Low risk	22/04/2019
DCM	MV640	Rose Bengal Chloramphenicol HiVeg™ Agar	Low risk	22/04/2019
DCM	M1972	RPMI 1640 Agar w/ MOPS & 2% Glucose w/o Sodium Bicarbonate (Twin Pack)	Low risk	20/12/2012
DCM	MV576	RS HiVeg Medium Base	Low risk	22/04/2019

DCM	M576	RS Medium Base	Low risk	22/04/2019
DCM	M409	SABHI Agar Base	Low risk	20/12/2012
DCM	MV409	SABHI HiVeg™ Agar Base	Low risk	20/12/2012
DCM	M1744	Sabouraud Agar Glucose 4%	Low risk	20/12/2012
DCM	M1067	Sabouraud Chloramphenicol Agar	Low risk	20/12/2012
DCM	MV1067	Sabouraud Chloramphenicol HiVeg™ Agar	Low risk	20/12/2012
DCM	M664	Sabouraud Cycloheximide Chloramphenicol Agar	Low risk	20/12/2012
DCM	MV664	Sabouraud Cycloheximide Chloramphenicol HiVeg™ Agar	Low risk	20/12/2012
DCM	MH063	Sabouraud Dextrose Agar	Low risk	22/04/2019
DCM	M063	Sabouraud Dextrose Agar	Low risk	20/12/2012
DCM	M286	Sabouraud Dextrose Agar Base, Modified (Dextrose Agar Base, Emmons)	Low risk	20/12/2012
DCM	MH033	Sabouraud Dextrose Broth	Low risk	22/04/2019
DCM	M033	Sabouraud Dextrose Broth (Sabouraud Liquid Medium)	Low risk	20/12/2012
DCM	MCD063	Sabouraud Dextrose HiCynth™ Agar	Low risk	12/08/2015
DCM	MCD033	Sabouraud Dextrose HiCynth™ Broth	Low risk	12/08/2015
DCM	MV063	Sabouraud Dextrose HiVeg™ Agar	Low risk	20/12/2012
DCM	MV286	Sabouraud Dextrose HiVeg™ Agar Base, Modified (Dextrose HiVeg™ Agar Base, Emmons)	Low risk	20/12/2012
DCM	MV033	Sabouraud Dextrose HiVeg™ Broth (Sabouraud Liquid HiVeg™ Medium)	Low risk	20/12/2012
DCM	M1313	Sabouraud Dextrose Maltose Agar	Low risk	20/12/2012
DCM	M1460	Sabouraud Dextrose Maltose Broth	Low risk	20/12/2012
DCM	MV1313	Sabouraud Dextrose Maltose HiVeg™ Agar	Low risk	20/12/2012
DCM	MCD013	Sabouraud Fluid HiCynth™ Medium	Low risk	12/08/2015
DCM	M1472	Sabouraud Glucose Agar Base w/ Antibiotics	Low risk	20/12/2012
DCM	M062	Sabouraud Maltose Agar	Low risk	20/12/2012
DCM	M064	Sabouraud Maltose Broth	Low risk	20/12/2012
DCM	MV062	Sabouraud Maltose HiVeg™ Agar	Low risk	20/12/2012
DCM	MV064	Sabouraud Maltose HiVeg™ Broth	Low risk	20/12/2012
DCM	M844	Saccharose Broth	Low risk	20/12/2012
DCM	M1619	Sakazakii DHL Agar	Low risk	20/12/2012
DCM	M942	Saline Agar	Low risk	20/12/2012
DCM	M1778	Saline Lysine Decarboxylase Medium	Low risk	20/12/2012
DCM	M1633	Salmonella Agar (HiCrome™ RajHans Medium)	Low risk	20/12/2012
DCM	M1634	Salmonella Agar, Modified (HiCrome™ RajHans Medium, Modified)	Low risk	20/12/2012
DCM	M573	Salmonella Agar, ONOZ	Low risk	20/12/2012
DCM	M1078	Salmonella Differential Agar (Twin Pack) (RajHans Medium)	Low risk	20/12/2012
DCM	M1082	Salmonella Differential Agar, Modified (Twin Pack)	Low risk	20/12/2012
DCM	MCD1078	Salmonella Differential HiCynth™ Agar (Twin Pack)	Low risk	25/08/2016

DCM	MV1078	Salmonella Differential HiVeg™ Agar (RajHans HiVeg™ Medium) (Twin Pack)	Low risk	20/12/2012
DCM	MV1082	Salmonella Differential HiVeg™ Agar, Modified (Twin Pack)	Low risk	20/12/2012
DCM	MV573	Salmonella HiVeg™ Agar, ONOZ	Low risk	20/12/2012
DCM	M1767	Salt Agar, Modified	Low risk	20/12/2012
DCM	M1290	Salt Broth, Modified	Low risk	20/12/2012
DCM	M155	Salt M Broth	Low risk	20/12/2012
DCM	M821	Salt Polymyxin Broth Base	Low risk	20/12/2012
DCM	MV821	Salt Polymyxin HiVeg™ Broth Base	Low risk	20/12/2012
DCM	M1276	Sauton's Fluid Medium Base	Low risk	20/12/2012
DCM	M1535	SBG Enrichment Broth (Twin Pack)	Low risk	20/12/2012
DCM	M291	Schaedler Agar	Low risk	20/12/2012
DCM	M292	Schaedler Broth	Low risk	20/12/2012
DCM	MV291	Schaedler HiVeg™ Agar	Low risk	20/12/2012
DCM	MV292	Schaedler HiVeg™ Broth	Low risk	20/12/2012
DCM	M1882	Selective Broth for MRSA	Low risk	20/12/2012
DCM	M052	Selenite Broth (Selenite F Broth) (Twin Pack)	Low risk	20/12/2012
DCM	M970	Selenite Broth Base w/o Biselenite	Low risk	20/12/2012
DCM	M1079	Selenite Cystine Broth Base w/o Biselenite	Low risk	20/12/2012
DCM	M1536	Selenite F Broth w/ Dulcitol (Dulcitol Selenite Broth) (Twin Pack)	Low risk	20/12/2012
DCM	M1534	Selenite Mannitol Broth (Mannitol Selenite Broth) (Twin Pack)	Low risk	20/12/2012
DCM	M1321	Semisolid LM Medium	Low risk	20/12/2012
DCM	M1282	Semisolid Rappaport Vassiliadis Medium, Modified	Low risk	22/04/2019
DCM	M1998	Semisolid RV Medium w/ 0.9% Agar	Low risk	25/08/2016
DCM	MV296	Sensitivity Test HiVeg™ Medium	Low risk	20/12/2012
DCM	M296	Sensitivity Test Medium	Low risk	20/12/2012
DCM	M1301	Sheep Blood Agar Base	Low risk	20/12/2012
DCM	M1739	Shepard's Differential Agar Base (A7 Agar Base)	Low risk	20/12/2012
DCM	M411	Simmons Agar Base	Low risk	20/12/2012
DCM	M099	Simmons Citrate Agar	Low risk	20/12/2012
DCM	M099S	Simmons Citrate Agar	Low risk	20/12/2012
DCM	M612A	Slanetz and Bartley Medium w/o TTC	Low risk	10/11/2020
DCM	M5296	SM Tryptone Glucose Glycerin Medium	Low risk	25/11/2017
DCM	M960	Smibert's Semisolid Brucella Medium	Low risk	20/12/2012
DCM	M106	Snyder Test Agar (B.C.G. - Dextrose Agar)	Low risk	20/12/2012
DCM	MV106	Snyder Test HiVeg™ Agar (B.C.G. - Dextrose HiVeg™ Agar)	Low risk	20/12/2012
DCM	M767	Sodium Azide Crystal Violet Blood Agar Base	Low risk	20/12/2012
DCM	M1079B	Sodium Biselenite	Low risk	22/04/2019
DCM	M298	Sorbitol Agar (MacConkey Sorbitol Agar)	Low risk	20/12/2012
DCM	MV298	Sorbitol HiVeg™ Agar (MacConkey Sorbitol HiVeg™ Agar)	Low risk	20/12/2012

DCM	M299	Sorbitol Iron Agar	Low risk	20/12/2012
DCM	MV299	Sorbitol Iron HiVeg™ Agar	Low risk	20/12/2012
DCM	M935	Soya Peptone Yeast Extract Agar	Low risk	20/12/2012
DCM	M1286	Soyabean Bile Broth Base	Low risk	20/12/2012
DCM	M290	Soyabean Casein Digest Agar (Tryptone Soya Agar)	Low risk	22/04/2019
DCM	M109	Soyabean Casein Digest Agar w/ Yeast Extract and Hemin (Tryptone Soya Agar w/ Yeast Extract and Hemin)	Low risk	20/12/2012
DCM	M011	Soyabean Casein Digest Medium (Tryptone Soya Broth)	Low risk	22/04/2019
DCM	M323	Soyabean Casein Digest Medium w/ 0.1% Agar (Tryptone Soya Broth w/ 0.1% Agar)	Low risk	20/12/2012
DCM	M207	Soyabean Casein Digest Medium w/ Yeast Extract and Ferric pyrophosphate	Low risk	20/12/2012
DCM	M322	Soyabean Casein Digest Medium w/o Dextrose (Tryptone SoyaBroth w/o Dextrose)	Low risk	28/04/2017
DCM	MV1286	Soyabean HiVeg™ Broth Base	Low risk	20/12/2012
DCM	MV011	Soyabean HiVeg™ Medium	Low risk	22/04/2019
DCM	MV323	Soyabean HiVeg™ Medium w/ 0.1% Agar (Tryptone Soya HiVeg™ Broth w/ 0.1% Agar)	Low risk	20/12/2012
DCM	MV207	Soyabean HiVeg™ Medium w/ Yeast Extract and Ferric pyrophosphate	Low risk	20/12/2012
DCM	MV290	SoyabeanHiVeg™ Agar	Low risk	22/04/2019
DCM	MH011	Soybean Casein Digest Medium (Casein Soybean Digest Broth)	Low risk	22/04/2019
DCM	MH290	Soybean-Casein Digest Agar (Casein Soyabean Digest Agar)	Low risk	22/04/2019
DCM	M211	Special Infusion Agar (BHI Agar)	Low risk	20/12/2012
DCM	MV211	Special Infusion Agar, HiVeg™ (BHI Agar, HiVeg™)	Low risk	20/12/2012
DCM	M1613	Special YM Medium	Low risk	20/12/2012
DCM	M300	Specimen Preservative Medium Base (SP Hajna)	Low risk	20/12/2012
DCM	M445	Spirit Blue Agar	Low risk	20/12/2012
DCM	MV445	Spirit Blue HiVeg™ Agar	Low risk	20/12/2012
DCM	M412	Spirolate Broth, OMATA	Low risk	20/12/2012
DCM	MV412	Spirolate HiVeg™ Broth, OMATA	Low risk	20/12/2012
DCM	MCD108	SS HiCynth™ Agar (Salmonella Shigella HiCynth™ Agar)	Low risk	12/08/2015
DCM	M108	SS Agar (Salmonella Shigella Agar)	Low risk	20/12/2012
DCM	M108D	SS Agar (Salmonella Shigella Agar)	Low risk	16/12/2017
DCM	M1979R	SS Agar Modified (w/sucrose)	Low risk	25/08/2016
DCM	M1979	SS Agar w/sucrose	Low risk	20/12/2012
DCM	M1032	SS Agar, Modified	Low risk	20/12/2012
DCM	MV108	SS HiVeg™ Agar (Salmonella Shigella HiVeg™ Agar)	Low risk	20/12/2012
DCM	M1959	SS Selective Agar, Improved	Low risk	20/12/2012
DCM	M1703	SSDC agar	Low risk	20/12/2012
DCM	M1608	β-Streptococcus Selective Agar Base	Low risk	20/12/2012
DCM	M675	Staib's Medium (Bird Seed Agar)	Low risk	20/12/2012
DCM	M883	Standard Infusion Agar	Low risk	20/12/2012

DCM	MV883	Standard Infusion Agar, HiVeg™	Low risk	20/12/2012
DCM	M116	Standard Nutrient Broth (H.S. Vaccine Medium)	Low risk	20/12/2012
DCM	MV116	Standard Nutrient HiVeg™ Broth (H.S. Vaccine HiVeg™ Medium)	Low risk	20/12/2012
DCM	M578	Standard Staphylococcus Broth	Low risk	20/12/2012
DCM	MV578	Standard Staphylococcus HiVeg™ Broth	Low risk	20/12/2012
DCM	M156	Staphylococcus Agar No. 110 w/ Azide	Low risk	20/12/2012
DCM	M521	Staphylococcus Agar No.110	Low risk	20/12/2012
DCM	MV521	Staphylococcus HiVeg™ Agar No. 110	Low risk	20/12/2012
DCM	M1965	Stenotrophomonas Selective Agar Base	Low risk	20/12/2012
DCM	M1840R	Streptococcus Agalactiae Selective Agar Base (HiCrome™ Strep B Selective Agar Base)	Low risk	30/10/2018
DCM	M465	Streptococcus Enrichment Broth (SE Broth)	Low risk	20/12/2012
DCM	MV465	Streptococcus Enrichment HiVeg™ Broth (SE HiVeg™ Broth)	Low risk	20/12/2012
DCM	M304	Streptococcus Selection Agar	Low risk	20/12/2012
DCM	M303	Streptococcus Selection Broth	Low risk	20/12/2012
DCM	MV304	Streptococcus Selection HiVeg™ Agar	Low risk	20/12/2012
DCM	MV303	Streptococcus Selection HiVeg™ Broth	Low risk	20/12/2012
DCM	M1735	Stuart Medium w/o Methylene Blue with Charcoal	Low risk	20/12/2012
DCM	M306	Stuart Transport Medium (Transport Medium, Stuart)	Low risk	20/12/2012
DCM	M1131	Stuart Transport Medium w/o Methylene Blue	Low risk	20/12/2012
DCM	M1203	Stuart Transport Medium w/o Sodium Glycerophosphate	Low risk	20/12/2012
DCM	M308	Sulpha Sensitivity Test Agar	Low risk	20/12/2012
DCM	MV837	T.S.C./S.F.P. HiVeg™ Agar Base (Perfringens HiVeg™ Agar Base)	Low risk	20/12/2012
DCM	M100	TB Broth Base	Low risk	20/12/2012
DCM	M034	TB Broth Base w/o Tween 80	Low risk	20/12/2012
DCM	MV100	TB HiVeg™ Broth Base	Low risk	20/12/2012
DCM	MV034	TB HiVeg™ Broth Base w/o Tween 80	Low risk	20/12/2012
DCM	M189	TCBS Agar	Low risk	20/12/2012
DCM	M870	TCBS Agar (Selective)	Low risk	20/12/2012
DCM	M870A	TCBS Agar, Modified	Low risk	20/12/2012
DCM	MCD870	TCBS HiCynth™ Agar (Selective)	Low risk	25/08/2016
DCM	MV189	TCBS HiVeg™ Agar	Low risk	20/12/2012
DCM	MV870	TCBS HiVeg™ Agar (Selective)	Low risk	20/12/2012
DCM	M529	Teepol Broth (Twin Pack)	Low risk	10/11/2020
DCM	MV529	Teepol HiVeg™ Broth (Twin Pack)	Low risk	10/11/2020
DCM	M1260	Tellurite Blood Agar Base	Low risk	20/12/2012
DCM	M448	Tellurite Glycine Agar Base	Low risk	20/12/2012
DCM	M616	Tergitol-7 Agar Base	Low risk	20/12/2012
DCM	M850	Tergitol-7 Agar H	Low risk	20/12/2012
DCM	M851	Tergitol-7 Broth	Low risk	20/12/2012

DCM	MV616	Tergitol-7 HiVeg™ Agar Base	Low risk	20/12/2012
DCM	MV850	Tergitol-7 HiVeg™ Agar H	Low risk	20/12/2012
DCM	MV851	Tergitol-7 HiVeg™ Broth	Low risk	20/12/2012
DCM	M032	Tetrathionate Broth Base (w/o Iodine and BG) (Fluid Tetrathionate Medium w/o Iodine and BG)	Low risk	20/12/2012
DCM	MV032	Tetrathionate HiVeg™ Broth Base (w/o Iodine and BG) (Fluid Tetrathionate HiVeg™ Medium w/o Iodine and BG)	Low risk	20/12/2012
DCM	MV413	Thayer Martin HiVeg™ Medium Base	Low risk	20/12/2012
DCM	M413	Thayer Martin Medium Base	Low risk	20/12/2012
DCM	M610	Thiogel Medium	Low risk	20/12/2012
DCM	M608	Thioglycollate Agar	Low risk	20/12/2012
DCM	M010	Thioglycollate Broth, Alternative (Alternative Thioglycollate Medium)(NIH Thioglycollate Broth)	Low risk	20/12/2012
DCM	MCD010	Thioglycollate HiCynth™ Broth, Alternative (Alternative Thioglycollate HiCynth™ Medium)(NIH Thioglycollate HiCynth™ Broth)	Low risk	12/08/2015
DCM	MV608	Thioglycollate HiVeg™ Agar	Low risk	20/12/2012
DCM	MV010	Thioglycollate HiVeg™ Broth, Alternative (Alternative Thioglycollate HiVeg™ Medium)(NIH HiVeg™ Thioglycollate Broth)	Low risk	20/12/2012
DCM	MV195	Thioglycollate HiVeg™ Medium, Linden (Brewer Thioglycollate HiVeg™ Medium, Modified)	Low risk	20/12/2012
DCM	M979	Thioglycollate Medium w/ Hemin and Vitamin K	Low risk	20/12/2012
DCM	M195	Thioglycollate Medium, Linden (Brewer Thioglycollate Medium, Modified)	Low risk	20/12/2012
DCM	M853	Thiol Broth	Low risk	20/12/2012
DCM	MV853	Thiol HiVeg™ Broth	Low risk	20/12/2012
DCM	MV852	Thiol HiVeg™ Medium	Low risk	20/12/2012
DCM	M852	Thiol Medium	Low risk	20/12/2012
DCM	M314	Tinsdale Agar Base	Low risk	20/12/2012
DCM	MV314	Tinsdale HiVeg™ Agar Base	Low risk	20/12/2012
DCM	M313	Todd Hewitt Broth	Low risk	20/12/2012
DCM	MV313	Todd Hewitt HiVeg™ Broth	Low risk	20/12/2012
DCM	M2127	Todd Hewitt Broth w/colistin & Nalidixic Acid	Low risk	17/06/2021
DCM	M879	Tomato Juice Agar, Special	Low risk	20/12/2012
DCM	MV879	Tomato Juice HiVeg™ Agar, Special	Low risk	20/12/2012
DCM	M1149	Transgrow Medium Base	Low risk	20/12/2012
DCM	M315	Transport Charcoal Medium	Low risk	20/12/2012
DCM	M1487	Transport Liquid Medium	Low risk	20/12/2012
DCM	M306	Transport Medium Stuart (Stuart Transport Medium)	Low risk	20/12/2012
DCM	M202	Transport Medium w/o Charcoal (Cary - Blair Medium Base)	Low risk	20/12/2012
DCM	M684	Transport Medium, Amies w/o Charcoal	Low risk	20/12/2012
DCM	M665	Trichomonas Agar Base	Low risk	20/12/2012
DCM	M1204	Trichomonas Broth Base No. 2	Low risk	20/12/2012

DCM	M305	Trichomonas Broth Base, Kupferberg (Kupferberg Trichomonas Broth Base)	Low risk	20/12/2012
DCM	MV665	Trichomonas HiVeg™ Agar Base	Low risk	20/12/2012
DCM	MV305	Trichomonas HiVeg™ Broth Base, Kupferberg (Kupferberg Trichomonas HiVeg™ Broth Base)	Low risk	20/12/2012
DCM	MV460	Trichomonas Modified CPLM HiVeg™ Medium Base (Modified CPLM HiVeg™ Medium Base)	Low risk	20/12/2012
DCM	M460	Trichomonas Modified CPLM Medium Base (Modified CPLM Medium Base)	Low risk	20/12/2012
DCM	M531	Trichophyton Agar-1	Low risk	20/12/2012
DCM	M532	Trichophyton Agar-2	Low risk	20/12/2012
DCM	M533	Trichophyton Agar-3	Low risk	20/12/2012
DCM	M534	Trichophyton Agar-4	Low risk	20/12/2012
DCM	M535	Trichophyton Agar-5	Low risk	20/12/2012
DCM	M536	Trichophyton Agar-6	Low risk	20/12/2012
DCM	M152	Trichophyton Agar-7	Low risk	20/12/2012
DCM	MV531	Trichophyton HiVeg™ Agar-1	Low risk	20/12/2012
DCM	MV532	Trichophyton HiVeg™ Agar-2	Low risk	20/12/2012
DCM	MV533	Trichophyton HiVeg™ Agar-3	Low risk	20/12/2012
DCM	MV534	Trichophyton HiVeg™ Agar-4	Low risk	20/12/2012
DCM	MV535	Trichophyton HiVeg™ Agar-5	Low risk	20/12/2012
DCM	M021	Triple Sugar Iron Agar	Low risk	22/04/2019
DCM	MV021	Triple Sugar Iron HiVeg™ Agar	Low risk	22/04/2019
DCM	M1028	Tryptic Digest Broth(Field's Tryptic Digest Broth)	Low risk	20/12/2012
DCM	MV1028	Tryptic Digest Broth, HiVeg™ (Field's Tryptic Digest Broth, HiVeg™)	Low risk	20/12/2012
DCM	M1591	Tryptone Bile Glucuronic Agar (TBX Agar)	Low risk	22/04/2019
DCM	M463	Tryptone Broth (Tryptone Water)	Low risk	22/04/2019
DCM	MV364	Tryptone Nitrate HiVeg™ Medium (Indole Nitrate HiVeg™ Medium)	Low risk	20/12/2012
DCM	M364	Tryptone Nitrate Medium (Indole Nitrate Medium)	Low risk	20/12/2012
DCM	M969	Tryptone Peptone Glucose Yeast Extract Broth Base w/o Trypsin	Low risk	20/12/2012
DCM	MV969	Tryptone Peptone Glucose Yeast Extract HiVeg™ Broth Base w/o Trypsin	Low risk	20/12/2012
DCM	M323	Tryptone Soya Broth w/ 0.1% Agar (Soyabean Casein Digest Medium w/ 0.1% Agar)	Low risk	20/12/2012
DCM	MV323	Tryptone Soya HiVeg™ Broth w/ 0.1% Agar (Soyabean HiVeg™ Medium w/ 0.1% Agar)	Low risk	20/12/2012
DCM	M1948	Tryptone Soya Serum Bacitracin Vancomycin Agar (TSBV)	Low risk	08/12/2017
DCM	M1217	Tryptone Sucrose Tetrazolium Agar Base (TSTA)	Low risk	20/12/2012
DCM	M1056	Tryptone Tellurite Agar Base	Low risk	20/12/2012
DCM	MV463	Tryptone Water, HiVeg™ (Tryptone Broth,HiVeg™)	Low risk	22/04/2019
DCM	M1975	Tryptone yeast extract cystine w/sucrose and w/O bacitracin agar (TYCSB)	Low risk	20/12/2012
DCM	M2046I	Tryptone Yeast Sodium Sulphite Agar Base	Low risk	10/11/2020

DCM	M538	Tryptose Agar	Low risk	20/12/2012
DCM	M996	Tryptose Agar w/ Thiamine HCl	Low risk	20/12/2012
DCM	MV996	Tryptose Agar w/ Thiamine HCl, HiVeg™	Low risk	20/12/2012
DCM	MV538	Tryptose Agar, HiVeg™	Low risk	20/12/2012
DCM	M097	Tryptose Blood Agar Base	Low risk	20/12/2012
DCM	M450	Tryptose Blood Agar Base w/ Yeast Extract	Low risk	20/12/2012
DCM	MV450	Tryptose Blood Agar Base w/ Yeast Extract, HiVeg™	Low risk	20/12/2012
DCM	MV097	Tryptose Blood Agar Base, HiVeg™	Low risk	20/12/2012
DCM	M177	Tryptose Broth	Low risk	20/12/2012
DCM	M997	Tryptose Broth w/ Thiamine HCl	Low risk	20/12/2012
DCM	MV177	Tryptose Broth, HiVeg™	Low risk	20/12/2012
DCM	M5393	Tryptose Phosphate Broth	Low risk	30/10/2018
DCM	M093	Tryptose Phosphate Broth	Low risk	20/12/2012
DCM	MV093	Tryptose Phosphate Broth, HiVeg™	Low risk	20/12/2012
DCM	M1532	Tryptose Phosphate Broth, Modified	Low risk	20/12/2012
DCM	M093G	Tryptose Phosphate Broth, Sterile	Low risk	22/04/2019
DCM	M2060	Tryptose Serum Agar Base	Low risk	10/11/2020
DCM	M2019	Tryptose Serum Broth Base(Modified Newin	Low risk	25/08/2016
DCM	M837	Tryptose Sulphite Cycloserine (T.S.C. / S.F.P.) Agar Base (Perfringens Agar Base)	Low risk	20/12/2012
DCM	M1780	TS Saline Agar (Triple Sugar Saline Iron Agar)	Low risk	20/12/2012
DCM	M2016	TSB w/6.5% NaCl	Low risk	25/08/2016
DCM	M1220	TTC Broth Base (Triclosan Ticarcillin Chlorate Broth)	Low risk	20/12/2012
DCM	MV1220	TTC HiVeg™ Broth Base	Low risk	20/12/2012
DCM	M1912	Tween Esterase Test Agar Base	Low risk	20/12/2012
DCM	M1817	Universal Fastidious Culture Agar	Low risk	20/12/2012
DCM	M1818	Universal Fastidious Culture Broth	Low risk	10/11/2020
DCM	M112S	Urea Agar Base (Christensen)	Low risk	20/12/2012
DCM	M112	Urea Agar Base (Christensen) (Autoclavable)	Low risk	20/12/2012
DCM	M112A	Urea Agar Base (Filter Sterilizable) (w/o Agar)	Low risk	20/12/2012
DCM	M112I	Urea Agar Base, Christensen	Low risk	20/12/2012
DCM	M111A	Urea Broth (Filter Sterilizable)	Low risk	20/12/2012
DCM	M111	Urea Broth Base (Diagnostic Stuart's Urea Broth Base)	Low risk	20/12/2012
DCM	MV112	Urea HiVeg™ Agar Base (Christensen) (Autoclavable)	Low risk	20/12/2012
DCM	M1784I	Urea Indole Broth, Modified	Low risk	20/12/2012
DCM	M1784	Urea Indole Medium	Low risk	20/12/2012
DCM	M328	V Infusion Agar	Low risk	20/12/2012
DCM	M329	V Infusion Broth	Low risk	20/12/2012
DCM	M1057	Vaginalis Agar Base	Low risk	20/12/2012
DCM	M1763	Vancomycin Resistant Enterococci (VRE) Agar Base	Low risk	20/12/2012

DCM	M1762	Vancomycin Resistant Enterococci (VRE) Broth Base	Low risk	20/12/2012
DCM	M416	Veillonella Agar Base	Low risk	20/12/2012
DCM	MV416	Veillonella HiVeg™ Agar Base	Low risk	20/12/2012
DCM	M820	Vibrio Agar	Low risk	20/12/2012
DCM	MV820	Vibrio HiVeg™ Agar	Low risk	20/12/2012
DCM	M049	Violet Red Bile Agar	Low risk	28/04/2017
DCM	M049A	Violet Red Bile Agar	Low risk	16/12/2017
DCM	M1684	Violet Red Bile Agar w/ Glucose and Lactose	Low risk	22/04/2019
DCM	MH581	Violet Red Bile Glucose Agar	Low risk	22/04/2019
DCM	M581	Violet Red Bile Glucose Agar w/o Lactose	Low risk	25/11/2017
DCM	MCD581	Violet Red Bile Glucose HiCynth™ Agar w/o Lactose	Low risk	04/07/2018
DCM	MV581	Violet Red Bile Glucose HiVeg™ Agar w/o Lactose	Low risk	04/07/2018
DCM	MCD049	Violet Red Bile HiCynth™ Agar	Low risk	28/04/2017
DCM	MV049	Violet Red HiVeg™ Agar	Low risk	28/04/2017
DCM	MCD023	Vogel Johnson HiCynth™ Agar Base w/o Tellurite (V.J. HiCynth™ Agar)	Low risk	12/08/2015
DCM	M023	Vogel-Johnson Agar Base w/o Tellurite (V.J. Agar)	Low risk	20/12/2012
DCM	MU023	Vogel-Johnson Agar Medium	Low risk	20/12/2012
DCM	MV023	Vogel-Johnson HiVeg™ Agar Base w/o Tellurite (V. J. HiVeg™ Agar)	Low risk	20/12/2012
DCM	MV662	VP HiVeg™ Medium	Low risk	20/12/2012
DCM	M662	VP Medium	Low risk	20/12/2012
DCM	M626	Wagatsuma Agar Base	Low risk	20/12/2012
DCM	MV626	Wagatsuma HiVeg™ Agar Base	Low risk	20/12/2012
DCM	M1059	Wayne Sulphatase Agar Base	Low risk	20/12/2012
DCM	M832	Wilkins Chalgren Anaerobic Agar Base	Low risk	20/12/2012
DCM	M863	Wilkins Chalgren Anaerobic Broth Base	Low risk	20/12/2012
DCM	MV832	Wilkins Chalgren Anaerobic HiVeg™ Agar Base	Low risk	20/12/2012
DCM	MV863	Wilkins Chalgren Anaerobic HiVeg™ Broth Base	Low risk	25/08/2016
DCM	M331	Wilson Blair Agar Base	Low risk	20/12/2012
DCM	M332	Wilson Blair Agar w/ BG	Low risk	20/12/2012
DCM	MV331	Wilson Blair HiVeg™ Agar Base	Low risk	20/12/2012
DCM	MV332	Wilson Blair HiVeg™ Agar w/ BG	Low risk	20/12/2012
DCM	MV031	XLD HiVeg™ Agar	Low risk	20/12/2012
DCM	M1147	XLT4 Agar Base	Low risk	20/12/2012
DCM	MV1147	XLT4 HiVeg™ Agar Base	Low risk	20/12/2012
DCM	M336	Xylose Lysine Agar Base	Low risk	20/12/2012
DCM	M031	Xylose Lysine Deoxycholate Agar (XLD Agar)	Low risk	20/12/2012
DCM	MCD031	Xylose Lysine Deoxycholate HiCynth™ Agar (XLD HiCynth™ Agar)	Low risk	12/08/2015
DCM	MH031	Xylose-Lysine-Deoxycholate Agar	Low risk	22/04/2019

DCM	M424	Yeast Malt Agar (YM Agar) (ISP Medium No. 2)	Low risk	22/04/2019
DCM	M425	Yeast Malt Broth (YM Broth)	Low risk	20/12/2012
DCM	MV424	Yeast Malt HiVeg™ Agar (YM HiVeg™ Agar)	Low risk	22/04/2019
DCM	MV425	Yeast Malt HiVeg™ Broth (YM HiVeg™ Broth)	Low risk	20/12/2012
DCM	M1421	YEP Agar	Low risk	30/10/2018
DCM	M1823	YEP Agar, Modified	Low risk	10/11/2020
DCM	M1367	Yersinia Enrichment Broth Base	Low risk	20/12/2012
DCM	M843	Yersinia Selective Agar Base	Low risk	20/12/2012
DCM	M1861	Yersinia Selective Broth Base	Low risk	20/12/2012
DCM	MV843	Yersinia Selective HiVeg™ Agar Base	Low risk	20/12/2012
DCM	EC211CR	BHI Agar (HiEncap™ water-soluble capsule)	Low risk	25/08/2016
DCM	EC210CR	BHI Broth (HiEncap™ water-soluble capsule)	Low risk	25/08/2016
DCM	EC073DR	Blood Agar Base (HiEncap™ water-soluble capsule)	Low risk	25/08/2016
DCM	EC1297ACR	HiCrome™ Candida Differential Agar (HiEncap™ water-soluble capsule)	Low risk	25/08/2016
DCM	EC1297ARDR	HiCrome™ Candida Differential Agar (HiEncap™ water-soluble capsule)	Low risk	25/08/2016
DCM	EC1297ADR	HiCrome™ Candida Differential Agar (HiEncap™ water-soluble capsule)	Low risk	25/08/2016
DCM	EC1674CCLR	HiCrome™ MeReSa Agar Base (HiEncap™ water-soluble capsule)	Low risk	25/08/2016
DCM	EC1353CCLR	HiCrome™ UTI Agar (HiEncap™ water-soluble capsule)	Low risk	25/08/2016
DCM	EC1353CR	HiCrome™ UTI Agar (HiEncap™ water-soluble capsule)	Low risk	25/08/2016
DCM	EC1353DR	HiCrome™ UTI Agar (HiEncap™ water-soluble capsule)	Low risk	25/08/2016
DCM	EC211CCL	HiEncap™ BHI Agar (HiEncap™ Special Infusion Agar)	Low risk	12/08/2015
DCM	EC210D	HiEncap™ BHI Broth	Low risk	12/08/2015
DCM	EC210CCL	HiEncap™ BHI Broth	Low risk	12/08/2015
DCM	EC073D	HiEncap™ Blood Agar Base	Low risk	12/08/2015
DCM	EC073CCL	HiEncap™ Blood Agar Base	Low risk	12/08/2015
DCM	EC081CCL	HiEncap™ MacConkey Agar w/0.15% Bile Salt	Low risk	12/08/2015
DCM	EC082ACCL	HiEncap™ MacConkey Agar w/o CV, NaCl w/Bile Salts	Low risk	12/08/2015
DCM	EC173CCL	HiEncap™ Mueller Hinton Agar	Low risk	12/08/2015
DCM	EC173D	HiEncap™ Mueller Hinton Agar	Low risk	12/08/2015
DCM	EC1084CCL	HiEncap™ Mueller Hinton Agar No.2	Low risk	12/08/2015
DCM	EC1084D	HiEncap™ Mueller Hinton Agar No.2	Low risk	12/08/2015
DCM	EC391CCL	HiEncap™ Mueller Hinton Broth	Low risk	12/08/2015
DCM	EC391D	HiEncap™ Mueller Hinton Broth	Low risk	12/08/2015
DCM	EC001DR	HiEncap™ Nutrient Agar	Low risk	25/08/2016
DCM	EC001CCL	HiEncap™ Nutrient Agar	Low risk	12/08/2015
DCM	EC001D	HiEncap™ Nutrient Agar	Low risk	12/08/2015
DCM	EC002CCL	HiEncap™ Nutrient Broth	Low risk	12/08/2015
DCM	EC002D	HiEncap™ Nutrient Broth	Low risk	12/08/2015

DCM	EC002M	HiEncap™ Nutrient Broth	Low risk	12/08/2015
DCM	EC091D	HiEncap™ Plate Count Agar	Low risk	16/12/2017
DCM	EC091CCL	HiEncap™ Plate Count Agar	Low risk	16/12/2017
DCM	EC063CCL	HiEncap™ Sabouraud Dextrose Agar	Low risk	12/08/2015
DCM	EC033CCL	HiEncap™ Sabouraud Dextrose Broth	Low risk	12/08/2015
DCM	EC033D	HiEncap™ Sabouraud Dextrose Broth	Low risk	12/08/2015
DCM	EC173DR	Mueller Hinton Agar (HiEncap™ water-soluble capsule)	Low risk	25/08/2016
DCM	EC1084DR	Mueller Hinton Agar No.2 (HiEncap™ water-soluble capsule)	Low risk	25/08/2016
DCM	EC391CR	Mueller Hinton Broth (HiEncap™ water-soluble capsule)	Low risk	25/08/2016
DCM	EC002CR	Nutrient Broth (HiEncap™ water-soluble capsule)	Low risk	25/08/2016
DCM	EC063CCLR	Sabouraud Dextrose Agar (HiEncap™ water-soluble capsule)	Low risk	25/08/2016
DCM	EC033CR	Sabouraud Dextrose Broth (HiEncap™ water-soluble capsule)	Low risk	25/08/2016
DCM	EC031CCLR	Xylose Deoxycholate Agar (XLD Agar) (HiEncap™ water-soluble capsule)	Low risk	25/08/2016
DCM	GM618	Alkaline Peptone Water, Granulated	Low Risk	12/08/2015
DCM	GM491	Anaerobic Agar (Brewer) , Granulated	Low Risk	12/08/2015
DCM	GM672	Asparagine Broth (Coccidioidin and Histoplasmin Broth) , Granulated	Low Risk	12/08/2015
DCM	GM043	Baird Parker Agar Base, Granulated	Low Risk	12/08/2015
DCM	GM1091	Baird Staphylococcus Enrichment Broth Base, Granulated	Low risk	10/11/2020
DCM	GM211	BHI Agar (Special Infusion Agar) , Granulated	Low Risk	12/08/2015
DCM	GM210	BHI Broth, Granulated	Low Risk	12/08/2015
DCM	GM217	Bi.G.G.Y. Agar (Nickerson Medium) , Granulated	Low Risk	12/08/2015
DCM	GM027	Bismuth Sulphite Agar, Granulated	Low Risk	12/08/2015
DCM	GM073	Blood Agar Base (Infusion Agar) , Granulated	Low Risk	12/08/2015
DCM	GM073R	Blood Agar Base (Infusion Agar) w/o Blood, Granulated	Low risk	25/08/2016
DCM	GM834A	Blood Agar Base No. 2 w/ 1.2% Agar, Granulated	Low Risk	12/08/2015
DCM	GM016A	Brilliant Green Agar Base w/ 1.2% Agar, Granulated	Low Risk	12/08/2015
DCM	GM971	Brilliant Green Agar Base w/ Phosphates, Granulated	Low risk	20/12/2012
DCM	GM074	Brucella Agar Base, Granulated	Low Risk	12/08/2015
DCM	GM614	Buffered Peptone Water , Granulated	Low risk	22/04/2019
DCM	GM1275	Buffered Peptone Water w/ NaCl, Granulated	Low Risk	12/08/2015
DCM	GMH1275	Buffered Sodium Chloride-Peptone Solution pH 7.0 , Granulated	Low risk	22/04/2019
DCM	GM792	C.L.E.D. Agar w/ Bromo Thymol Blue, Granulated	Low Risk	12/08/2015
DCM	GMH024	Cetrimide Agar , Granulated	Low risk	22/04/2019
DCM	GM024	Cetrimide Agar Base, Granulated	Low Risk	12/08/2015
DCM	GM497	Clostridial Agar, Granulated	Low risk	25/08/2016
DCM	GMH144	Columbia Agar , Granulated	Low risk	22/04/2019
DCM	GM144	Columbia Blood Agar Base, Granulated	Low Risk	12/08/2015
DCM	GM188	D.T.M. Agar Base (Dermatophyte Test Agar Base) , Granulated	Low Risk	12/08/2015

DCM	GM030	Deoxycholate Agar, Granulated	Low Risk	12/08/2015
DCM	GM065	Deoxycholate Citrate Agar, Granulated	Low Risk	12/08/2015
DCM	GM286	Dextrose Agar Base, Emmons (Sabouraud Dextrose Agar Base, Modified) , Granulated	Low Risk	12/08/2015
DCM	GM1129	Dichloran Glycerol Medium Base , Granulated	Low risk	22/04/2019
DCM	GM1603	Differential Reinforced Clostridial Agar, Granulated	Low risk	10/11/2020
DCM	GM127	EC Broth, Granulated	Low Risk	12/08/2015
DCM	GM317	EMB Agar, Granulated	Low Risk	12/08/2015
DCM	GM022	EMB Agar, Levine, Granulated	Low Risk	12/08/2015
DCM	GM029	Endo Agar, Granulated	Low Risk	12/08/2015
DCM	GM029R	Endo Agar, Special	Low risk	25/08/2016
DCM	GM1075	Endo Agar, Modified, Granulated	Low Risk	12/08/2015
DCM	GMH287	Enterobacteria Enrichment Broth, Mossel , Granulated	Low risk	22/04/2019
DCM	GM013	Fluid Sabouraud Medium (Sabouraud Medium, Fluid) , Granulated	Low Risk	12/08/2015
DCM	GM025	Fluid Selenite Cystine Medium (Selenite Cystine Broth) (Twin Pack) , Granulated	Low Risk	12/08/2015
DCM	GM032	Fluid Tetrathionate Medium w/o Iodine and BG (Tetrathionate Broth Base w/o Iodine and BG) , Granulated	Low Risk	12/08/2015
DCM	GM009	Fluid Thioglycollate medium (Thioglycollate medium Fluid) , Granulated	Low risk	22/04/2019
DCM	GM434	GC Agar Base, Granulated	Low Risk	04/07/2018
DCM	GM070	Glucose Phosphate Broth (Buffered Glucose Broth) , Granulated	Low risk	12/08/2015
DCM	GM070R	Glucose Phosphate Broth (Buffered Glucose Broth) , Granulated	Low risk	04/07/2018
DCM	GMV070	Glucose Phosphate HiVeg™ Broth (Buffered Glucose HiVeg™ Broth) , Granulated	Low risk	20/12/2012
DCM	GM242	GN Broth, Hajna, Granulated	Low Risk	12/08/2015
DCM	GM467	Hektoen Enteric Agar, Granulated	Low Risk	12/08/2015
DCM	GM1297A	HiCrome™ Candida Differential Agar, Granulated	Low Risk	12/08/2015
DCM	GM1353	HiCrome™ UTI Agar, Granulated	Low Risk	12/08/2015
DCM	GM1007	KF Streptococcus Agar Base w/ BCP, Granulated	Low Risk	12/08/2015
DCM	GM1232	Kimmig Fungi Agar Base, Granulated	Low Risk	12/08/2015
DCM	GM1543	King's Medium A Base, Granulated	Low Risk	12/08/2015
DCM	GM078	Kligler Iron Agar, Granulated	Low Risk	12/08/2015
DCM	GM641	Lactobacillus MRS Agar (MRS Agar) , Granulated	Low Risk	12/08/2015
DCM	GM369	Lactobacillus MRS Broth (MRS Broth) , Granulated	Low Risk	12/08/2015
DCM	GM1003	Lactose Broth , Granulated	Low risk	22/04/2019
DCM	GM080	Lauryl Sulphate Broth (Lauryl Tryptose Broth) , Granulated	Low risk	22/04/2019
DCM	GM1380	Leifson Agar, Granulated	Low Risk	12/08/2015
DCM	GM890A	Listeria Enrichment Medium Base (UVM) , Granulated	Low Risk	12/08/2015
DCM	GM1064	Listeria Identification Agar Base (PALCAM) , Granulated	Low risk	22/04/2019
DCM	GM1090	Listeria Identification Broth Base (PALCAM) , Granulated	Low risk	22/04/2019

DCM	GM1145	Listeria Oxford Medium Base, Granulated	Low Risk	12/08/2015
DCM	GM889	Listeria Selective Broth Base, Granulated	Low Risk	12/08/2015
DCM	GM1865	Listeria Selective Enrichment Broth , Granulated	Low risk	22/04/2019
DCM	GM1001	LM Agar, Granulated	Low Risk	12/08/2015
DCM	GM162	Lowenstein Jensen Medium Base (L.J. Medium) , Granulated	Low Risk	12/08/2015
DCM	GMH081	MacConkey Agar , Granulated	Low risk	22/04/2019
DCM	GM081	MacConkey Agar w/0.15% Bile Salts,CV and NaCL, Granulated	Low Risk	12/08/2015
DCM	GM082A	MacConkey Agar w/o CV,NaCL w/0.5% Bile Salts, Granulated	Low Risk	12/08/2015
DCM	GM082	MacConkey Agar w/o CV,NaCLw/0.5% Sodium Taurocholate, Granulated	Low Risk	12/08/2015
DCM	GMH083	MacConkey Broth , Granulated	Low risk	22/04/2019
DCM	GM083	MacConkey Broth Purple w/BCP , Granulated	Low risk	22/04/2019
DCM	GM137	Malt Extract Agar Base (w/ Mycological Peptone) , Granulated	Low Risk	12/08/2015
DCM	GM255	Malt Extract Broth Base, Granulated	Low Risk	12/08/2015
DCM	GMH118	Mannitol Salt Agar , Granulated	Low risk	22/04/2019
DCM	GM118	Mannitol Salt Agar Base , Granulated	Low risk	12/08/2015
DCM	GM1030	Maximum Recovery Diluent , Granulated	Low risk	22/04/2019
DCM	GM1170	Modified Czapek Dox Agar, Granulated	Low risk	25/08/2016
DCM	GM1285	Modified EC Broth Base, Granulated	Low Risk	12/08/2015
DCM	GM1286I	Modified Soyabean Bile Broth Base , Granulated	Low risk	22/04/2019
DCM	GM1084	Mueller Hinton Agar No. 2, Granulated	Low Risk	12/08/2015
DCM	GM173	Mueller Hinton Agar, Granulated	Low Risk	12/08/2015
DCM	GM391	Mueller Hinton Broth, Granulated	Low Risk	12/08/2015
DCM	GM636	MYP Agar Base (Phenol Red Egg Yolk Polymyxin Agar Base) , Granulated	Low Risk	12/08/2015
DCM	GM1269	Nutrient Agar No.2 , Granulated	Low risk	12/08/2015
DCM	GM001	Nutrient Agar, Granulated	Low Risk	12/08/2015
DCM	GM002	Nutrient Broth, Granulated	Low Risk	12/08/2015
DCM	GM395	OF Basal Medium, Granulated	Low Risk	12/08/2015
DCM	GM933	Orange Serum Agar , Granulated	Low risk	22/04/2019
DCM	GM028	Peptone Water, Granulated	Low Risk	04/07/2018
DCM	GM837	Perfringens Agar Base (Tryptose Sulphite Cycloserine Agar Base) (T.S.C./S.F.P. Agar Base) , Granulated	Low Risk	12/08/2015
DCM	GM091	Plate Count Agar (Standard Methods Agar),Granulated	Low Risk	28/04/2017
DCM	GMH096	Potato Dextrose Agar , Granulated	Low risk	22/04/2019
DCM	GM096	Potato Dextrose Agar , Granulated	Low risk	22/04/2019
DCM	GM085	Pseudomonas Agar Base , Granulated	Low risk	22/04/2019
DCM	GM085	Pseudomonas Agar Base, Granulated	Low Risk	22/04/2019
DCM	GMH1491	Rappaport Vassiliadis Salmonella Enrichment Broth , Granulated	Low risk	22/04/2019
DCM	GM1491	Rappaport Vassiliadis Soya Broth (RVS Broth) , Granulated	Low Risk	12/08/2015
DCM	GMH443	Reinforced Medium for Clostridia , Granulated	Low risk	22/04/2019

DCM	GM149	Robinson's Cooked M Medium (R.C. Medium), Granulated	Low Risk	16/12/2017
DCM	GM130	Rogosa SL Agar, Granulated	Low Risk	12/08/2015
DCM	GM842	Rose Bengal Agar Base, Granulated	Low risk	12/08/2015
DCM	GM1067	Sabouraud Chloramphenicol Agar, Granulated	Low risk	25/08/2016
DCM	GM063	Sabouraud Dextrose Agar , Granulated	Low Risk	12/08/2015
DCM	GMH063	Sabouraud Dextrose Agar , Granulated	Low risk	22/04/2019
DCM	GM033	Sabouraud Dextrose Broth (Sabouraud Liquid Medium) , Granulated	Low Risk	12/08/2015
DCM	GMH033	Sabouraud Dextrose Broth , Granulated	Low risk	22/04/2019
DCM	GMV033	Sabouraud Dextrose HiVeg™ Broth (Sabouraud Liquid HiVeg™ Medium) , Granulated	Low Risk	12/08/2015
DCM	GM1313	Sabouraud Dextrose Maltose Agar, Granulated	Low Risk	12/08/2015
DCM	GM062	Sabouraud Maltose Agar, Granulated	Low Risk	12/08/2015
DCM	GM1619	Sakazakii DHL Agar, Granulated	Low Risk	12/08/2015
DCM	GM1078	Salmonella Differential Agar (Twin Pack), Raj Hans Medium (Twin Pack) , Granulated	Low Risk	12/08/2015
DCM	GM052	Selenite Broth (Selenite F Broth) (Twin Pack) , Granulated	Low Risk	12/08/2015
DCM	GM612A	Slanetz and Bartley Medium w/o TTC, Granulated	Low risk	10/11/2020
DCM	GM298R	Sorbitol Agar (Sorbitol MacConkey Agar)	Low risk	25/08/2016
DCM	GM290	Soyabean Casein Digest Agar (Tryptone Soya Agar) , Granulated	Low risk	22/04/2019
DCM	GM011	Soyabean Casein Digest Medium (Tryptone Soya Broth) , Granulated	Low risk	22/04/2019
DCM	GMH011	Soybean Casein Digest Medium (Casein Soybean Digest Broth) , Granulated	Low risk	22/04/2019
DCM	GMH290	Soybean-Casein Digest Agar (Casein Soyabean Digest Agar) , Granulated	Low risk	22/04/2019
DCM	GM108	SS Agar (Salmonella Shigella Agar) , Granulated	Low Risk	12/08/2015
DCM	GM189	TCBS Agar, Granulated	Low Risk	12/08/2015
DCM	GM010	Thioglycollate Broth, Alternative (Alternative Thioglycollate Medium)(NIH Thioglycollate Broth) , Granulated	Low risk	12/08/2015
DCM	GM021	Triple Sugar Iron Agar , Granulated	Low risk	22/04/2019
DCM	GM463	Tryptone Broth (Tryptone Water) , Granulated	Low risk	22/04/2019
DCM	GM177	Tryptose Broth, Granulated	Low Risk	12/08/2015
DCM	GM112	Urea Agar Base (Christensen) (Autoclavable)	Low Risk	30/10/2018
DCM	GM112A	Urea Agar Base (Filter sterilizable), Granulated	Low risk	25/08/2016
DCM	GM111A	Urea Broth (Filter sterilizable), Granulated	Low risk	25/08/2016
DCM	GM049	Violet Red Bile Agar, Granulated	Low risk	28/04/2017
DCM	GMH581	Violet Red Bile Glucose Agar , Granulated	Low risk	22/04/2019
DCM	GM581	Violet Red Bile Glucose Agar w/o Lactose, Granulated	Low risk	04/07/2018
DCM	GM031	Xylose Lysine Deoxycholate Agar (XLD Agar) , Granulated	Low Risk	12/08/2015
DCM	GMH031	Xylose-Lysine-Deoxycholate Agar , Granulated	Low risk	22/04/2019

Product group	Type/ Model / Ref number	Device Name	Risk Class	Date of CE compliance
Dehydrated Culture Media -Supplements				
DCM-S	FD001	Non Spore Anaerobic Supplement	Low risk	20/12/2012
DCM-S	FD002	G.N. Spore Anaerobic Supplement	Low risk	20/12/2012
DCM-S	FD003	Polymyxin B Selective Supplement	Low risk	20/12/2012
DCM-S	FD003B	Polymyxin B Selective Supplement	Low risk	04/07/2018
DCM-S	FD004	Bordetella Selective Supplement	Low risk	20/12/2012
DCM-S	FD005	Brucella Selective Supplement	Low risk	20/12/2012
DCM-S	FD006	Campylobacter Supplement-I (Blaser-Wang)	Low risk	20/12/2012
DCM-S	FD007	Campylobacter Supplement - II (Butzler)	Low risk	20/12/2012
DCM-S	FD008	Campylobacter Supplement- III (Skirrow)	Low risk	20/12/2012
DCM-S	FD009	Campylobacter Growth Supplement	Low risk	20/12/2012
DCM-S	FD010	Clostridium Difficile Supplement	Low risk	20/12/2012
DCM-S	FD013	S.F.P. Supplement (Perfringens S.F.P. Supplement)	Low risk	20/12/2012
DCM-S	FD014	T.S.C. Supplement (Perfringens T.S.C. Supplement)	Low risk	20/12/2012
DCM-S	FD015	Dermato Supplement	Low risk	20/12/2012
DCM-S	FD017	Legionella Selective Supplement	Low risk	20/12/2012
DCM-S	FD018	Middlebrook OADC Growth Supplement	Low risk	20/12/2012
DCM-S	FD019	Middlebrook ADC Growth Supplement	Low risk	20/12/2012
DCM-S	FD019R	Middlebrook ADC Growth Supplement	Low risk	10/11/2020
DCM-S	FD020	Oleic Albumin Supplement	Low risk	20/12/2012
DCM-S	FD021	GC Supplement w/ Antibiotics	Low risk	20/12/2012
DCM-S	FD022	Haemoglobin Powder	Low risk	20/12/2012
DCM-S	FD023	V.C.N. Supplement	Low risk	20/12/2012
DCM-S	FD024	V.C.N.T. Supplement	Low risk	20/12/2012
DCM-S	FD025	Vitamino Growth Supplement (Twin Pack)	Low risk	20/12/2012
DCM-S	FD025R	Vitamino Growth Supplement (Twin Pack)	Low risk	10/11/2020
DCM-S	FD026	Linco T Supplement	Low risk	20/12/2012
DCM-S	FD026R	Linco T Supplement	Low risk	10/11/2020
DCM-S	FD027	Yeast Autolysate Supplement	Low risk	20/12/2012
DCM-S	FD028	Vanclo T Supplement	Low risk	20/12/2012
DCM-S	FD029	Cetrinix Supplement	Low risk	22/04/2019
DCM-S	FD030	Staph-Strepto Supplement	Low risk	20/12/2012
DCM-S	FD031	Strepto supplement	Low risk	25/08/2016
DCM-S	FD033	Chloramphenicol Selective Supplement	Low risk	20/12/2012
DCM-S	FD034	Yersinia Selective Supplement	Low risk	20/12/2012
DCM-S	FD035	CC Supplement	Low risk	20/12/2012
DCM-S	FD036	CFC Supplement	Low risk	22/04/2019
DCM-S	FD037	Legionella Selective Supplement II	Low risk	20/12/2012

DCM-S	FD038	Legionella Selective Supplement III	Low risk	20/12/2012
DCM-S	FD039	Aeromonas Selective Supplement	Low risk	20/12/2012
DCM-S	FD040	Legionella Selective Supplement IV (MWY)	Low risk	20/12/2012
DCM-S	FD041A	Legionella Supplement (Twin Pack)	Low risk	20/12/2012
DCM-S	FD041AR	Legionella Growth Supplement (Legionella Supplement) (Twin Pack)	Low risk	25/08/2016
DCM-S	FD042	Campylobacter Selective Supplement IV (Preston Selective Supplement)	Low risk	20/12/2012
DCM-S	FD043	Doyle's Antibiotic Supplement	Low risk	20/12/2012
DCM-S	FD045	Egg Yolk Emulsion (100 ml per vial)	Low risk	20/12/2012
DCM-S	FD045B	Egg Yolk Emulsion	Low risk	04/07/2018
DCM-S	FD045L	Egg Yolk Emulsion (50ml per vial)	Low risk	04/07/2018
DCM-S	FD045R	Egg Yolk Emulsion (100 ml per vial)	Low risk	25/08/2016
DCM-S	FD045RC	Egg Yolk Emulsion (100 ml per vial)	Low risk	10/11/2020
DCM-S	FD046	Egg Yolk Tellurite Emulsion (100 ml per vial)	Low risk	20/12/2012
DCM-S	FD046B	Egg Yolk Tellurite Emulsion	Low risk	04/07/2018
DCM-S	FD046L	Egg Yolk Tellurite Emulsion (50ml per vial)	Low risk	04/07/2018
DCM-S	FD046N	Egg Yolk Tellurite Emulsion, Modified	Low risk	04/07/2018
DCM-S	FD046NL	Egg Yolk Tellurite Emulsion, Modified	Low risk	04/07/2018
DCM-S	FD046R	Egg Yolk Tellurite Emulsion	Low risk	10/11/2020
DCM-S	FD047	Potassium Tellurite 3.5% (1 ml per vial)	Low risk	20/12/2012
DCM-S	FD048	Urea 40% (5 ml per vial)	Low risk	20/12/2012
DCM-S	FD049	C.B.I. Supplement	Low risk	20/12/2012
DCM-S	FD052	Potassium Tellurite 1% (1 ml per vial)	Low risk	20/12/2012
DCM-S	FD053	Gruft Mycobacterial Supplement	Low risk	20/12/2012
DCM-S	FD054	GBS Supplement	Low risk	20/12/2012
DCM-S	FD056	G. Vaginalis Selective Supplement	Low risk	20/12/2012
DCM-S	FD057	TTC Solution 1% (10 ml per vial)	Low risk	20/12/2012
DCM-S	FD059	Basic Fuchsin (6.0 gm per vial)	Low risk	20/12/2012
DCM-S	FD061	Listeria Selective Supplement (PALCAM)	Low risk	22/04/2019
DCM-S	FD061R	Listeria Selective Supplement (PALCAM)	Low risk	04/07/2018
DCM-S	FD062	Bacteroides Selective Supplement	Low risk	20/12/2012
DCM-S	FD063	Listeria Selective Supplement II	Low risk	20/12/2012
DCM-S	FD063I	Listeria Selective Supplement II	Low risk	20/12/2012
DCM-S	FD066	Leptospira Enrichment	Low risk	20/12/2012
DCM-S	FD068	Sulpha Supplement	Low risk	20/12/2012
DCM-S	FD069	B P Sulpha Supplement	Low risk	20/12/2012
DCM-S	FD070	McBride Listeria Supplement	Low risk	20/12/2012
DCM-S	FD071	Oxford Listeria Supplement	Low risk	20/12/2012
DCM-S	FD072	KL Virulence Enrichment (20 ml per vial)	Low risk	20/12/2012
DCM-S	FD072D	KL Virulence Enrichment (500 ml)	Low risk	10/11/2020

DCM-S	FD072M	KL Virulence Enrichment (1000 ml)	Low risk	10/11/2020
DCM-S	FD073	Diphtheria Virulence Supplement (Part A & B)	Low risk	20/12/2012
DCM-S	FD075	Mycoplasma Enrichment Supplement	Low risk	20/12/2012
DCM-S	FD075R	Mycoplasma Enrichment Supplement	Low risk	10/11/2020
DCM-S	FD078	Campylobacter Selective Supplement (Karmali)	Low risk	10/11/2020
DCM-S	FD082	Ampicillin Supplement	Low risk	20/12/2012
DCM-S	FD090	Campylobacter Selective Supplement	Low risk	20/12/2012
DCM-S	FD091	Bromo Thymol Blue Supplement (20 mg per vial)	Low risk	20/12/2012
DCM-S	FD092	MUG Supplement (50 mg per vial)	Low risk	10/11/2020
DCM-S	FD093	Bromo Cresol Purple	Low risk	22/04/2019
DCM-S	FD094	Trichomonas Selective Supplement II	Low risk	20/12/2012
DCM-S	FD095	10% Lactic Acid Solution (10 ml per vial)	Low risk	20/12/2012
DCM-S	FD096	Novobiocin Supplement	Low risk	22/04/2019
DCM-S	FD099	Trichomonas Selective Supplement I	Low risk	20/12/2012
DCM-S	FD100	Mueller Tellurite Serum (25 ml per vial)	Low risk	20/12/2012
DCM-S	FD102	Ticarcillin Supplement	Low risk	20/12/2012
DCM-S	FD103	Potassium Chlorate Supplement	Low risk	20/12/2012
DCM-S	FD105	Park and Sanders Selective Supplement II	Low risk	20/12/2012
DCM-S	FD106	Campylobacter Supplement VI (Butzler)	Low risk	20/12/2012
DCM-S	FD111	Kimmig Selective Supplement (Twin Pack)	Low risk	20/12/2012
DCM-S	FD112	George Kimmig Selective Supplement	Low risk	20/12/2012
DCM-S	FD114	Vitamin K1 Supplement	Low risk	20/12/2012
DCM-S	FD117	Haemophilus Growth Supplement	Low risk	20/12/2012
DCM-S	FD118	Mucosal	Low risk	20/12/2012
DCM-S	FD119	Streptococcus Selective Supplement	Low risk	20/12/2012
DCM-S	FD120	Chlortetracycline Selective Supplement	Low risk	20/12/2012
DCM-S	FD126	Listeria Moxalactam Supplement	Low risk	20/12/2012
DCM-S	FD130	Nalidixic Selective Supplement	Low risk	20/12/2012
DCM-S	FD132	Campylobacter Selective Supplement w/ Hemin (Karmali)	Low risk	10/11/2020
DCM-S	FD135	CCDA Selective Supplement	Low risk	20/12/2012
DCM-S	FD136	Listeria UVM Supplement I	Low risk	20/12/2012
DCM-S	FD137	Listeria UVM Supplement II	Low risk	20/12/2012
DCM-S	FD142	Legionella Growth Supplement (BCYE)	Low risk	10/11/2020
DCM-S	FD142X	Legionella Growth Supplement	Low risk	10/11/2020
DCM-S	FD143	Legionella (GVPC) Selective Supplement	Low risk	20/12/2012
DCM-S	FD144	Legionella BMPA Selective Supplement	Low risk	10/11/2020
DCM-S	FD147	Tellurite - Cefixime Supplement	Low risk	20/12/2012
DCM-S	FD149	Neomycin Supplement	Low risk	20/12/2012
DCM-S	FD150	NYC Supplement	Low risk	20/12/2012
DCM-S	FD152	XLT4 Supplement	Low risk	20/12/2012

DCM-S	FD153	M-CP Selective Supplement - I	Low risk	10/11/2020
DCM-S	FD154	M-CP Selective Supplement - II	Low risk	10/11/2020
DCM-S	FD154A	M-CP Selective Supplement, Modified	Low risk	10/11/2020
DCM-S	FD157	Urea 5% (5 ml per vial)	Low risk	20/12/2012
DCM-S	FD158	Campylobacter Selective Supplement IV (Preston), Modified	Low risk	20/12/2012
DCM-S	FD159	Doyle'S Antibiotic Supplement, Modified	Low risk	04/07/2018
DCM-S	FD160	Legionella (GVPA) Selective Supplement, Modified	Low risk	04/07/2018
DCM-S	FD161	Brucella Selective Supplement, Modified	Low risk	04/07/2018
DCM-S	FD163	Listeria Selective Supplement II, Modified	Low risk	04/07/2018
DCM-S	FD164	Park and Sanders Selective Supplement II, Modified	Low risk	04/07/2018
DCM-S	FD165	Campylobacter Supplement -II (Butzler), Modified	Low risk	04/07/2018
DCM-S	FD169	CC Supplement, Modified	Low risk	04/07/2018
DCM-S	FD171	McBride Listeria Supplement, Modified	Low risk	04/07/2018
DCM-S	FD172	Oxford Listeria Supplement, Modified	Low risk	28/04/2017
DCM-S	FD172R	Oxford Listeria Supplement, Modified	Low risk	04/07/2018
DCM-S	FD173	Mycoprep (for 2 tests)	Low risk	16/12/2017
DCM-S	FD173B	Mycoprep (for 10 tests)	Low risk	16/12/2017
DCM-S	FD175	Mycoplasma Urogenital Selective Supplement	Low risk	20/12/2012
DCM-S	FD176	Dermato Supplement, Modified	Low risk	04/07/2018
DCM-S	FD179	Antibiotic Mixture for Borrelia (100 X) (5 ml per vial)	Low risk	20/12/2012
DCM-S	FD180	Rabbit serum	Low risk	25/08/2016
DCM-S	FD181	HiCrome™ Listeria Selective Supplement	Low risk	10/11/2020
DCM-S	FD183	Legionella Selective Supplement II, Modified	Low risk	04/07/2018
DCM-S	FD185	Anthraxis Selective Supplement	Low risk	20/12/2012
DCM-S	FD187	HiCrome™ EC O157 : H7 Selective Supplement	Low risk	05/11/2020
DCM-S	FD190	HiCrome®Hicrome ECC Selective Supplement	Low risk	22/04/2019
DCM-S	FD191	Oxacillin Resistance Selective Supplement	Low risk	20/12/2012
DCM-S	FD192	HiCrome™ Candida Selective Supplement	Low risk	20/12/2012
DCM-S	FD195	Fibrinogen Plasma Trypsin Inhibitor Supplement	Low risk	20/12/2012
DCM-S	FD196	Tetracycline Selective Supplement	Low risk	20/12/2012
DCM-S	FD198	Mycoplasma Cultivation Supplement	Low risk	20/12/2012
DCM-S	FD201	Albumin Glucose Supplement	Low risk	20/12/2012
DCM-S	FD206	Legionella Growth Supplement w/o L-Cysteine	Low risk	05/11/2020
DCM-S	FD206R	Legionella Growth Supplement w/o L-Cysteine	Low risk	10/11/2020
DCM-S	FD212	L. mono Selective Supplement I	Low risk	20/12/2012
DCM-S	FD212A	OA Listeria Selective Supplement	Low risk	10/11/2020
DCM-S	FD212B	L. mono Selective Supplement I	Low risk	04/07/2018
DCM-S	FD213	L. mono Selective Supplement II	Low risk	20/12/2012
DCM-S	FD214	L. mono Enrichment Supplement I	Low risk	20/12/2012
DCM-S	FD215	Vitamino Growth Supplement, Modified (Twin Pack)	Low risk	20/12/2012

DCM-S	FD215B	Vitamino Growth Supplement, Modified	Low risk	22/04/2019
DCM-S	FD225	Klebsiella Selective Supplement	Low risk	10/11/2020
DCM-S	FD226	Enterococcus faecium Selective Supplement	Low risk	10/11/2020
DCM-S	FD227	L. mono Enrichment Supplement II	Low risk	20/12/2012
DCM-S	FD229	MeReSa Selective Supplement	Low risk	20/12/2012
DCM-S	FD230	HiCrome EC 0157: H7 Selective Supplement	Low risk	22/04/2019
DCM-S	FD232	Burkholderia Cepacia Selective Supplement	Low risk	20/12/2012
DCM-S	FD233	Vancomycin Supplement	Low risk	20/12/2012
DCM-S	FD236	Sorbic Acid Supplement	Low risk	20/12/2012
DCM-S	FD241	Poctri supplement	Low risk	25/08/2016
DCM-S	FD242	Legionella Selective Supplement(GVPN)	Low risk	20/12/2012
DCM-S	FD243	Clostridium Difficile Supplement	Low risk	20/12/2012
DCM-S	FD245	HiCrome™ Nickels & Leesment Selective Supplement	Low risk	10/11/2020
DCM-S	FD246	Cefixime Supplement	Low risk	20/12/2012
DCM-S	FD247	ECO157:H7 Selective Supplement	Low risk	22/04/2019
DCM-S	FD248	Coagulase Plasma	Low risk	04/07/2018
DCM-S	FD248A	Coagulase Plasma w/ EDTA (From Rabbit)	Low risk	22/04/2019
DCM-S	FD248B	Rabbit plasma with EDTA and 15% NaCl	Low risk	22/04/2019
DCM-S	FD248R	Coagulase Supplement for Staphilococci	Low risk	22/04/2019
DCM-S	FD252	Gentamycin Selective Supplement	Low risk	22/04/2019
DCM-S	FD253	Urea Solution	Low risk	20/12/2012
DCM-S	FD254	Ureaplasma Selective Supplement	Low risk	04/07/2018
DCM-S	FD255	Ureaplasma Growth Supplement	Low risk	20/12/2012
DCM-S	FD259	Cefoxitin Supplement	Low risk	20/12/2012
DCM-S	FD261	Vancomycin Supplement	Low risk	20/12/2012
DCM-S	FD266	Listeria Moxalactam Supplement Modified	Low risk	20/12/2012
DCM-S	FD269	OFPBL Selective Supplement	Low risk	25/11/2017
DCM-S	FD270	Chromogenic Supplement	Low risk	10/11/2020
DCM-S	FD271	MDR Acinetobacter Selective Supplement	Low risk	25/08/2016
DCM-S	FD274	HiCrome™ Selective Salmonella Agar Supplement	Low risk	22/04/2019
DCM-S	FD277	HiCrome™ VRE Agar supplement	Low risk	20/12/2012
DCM-S	FD278	HiCrome™ ESBL Agar Supplement	Low risk	20/12/2012
DCM-S	FD279	HiCrome™ KPC Agar Supplement	Low risk	20/12/2012
DCM-S	FD280	Sterile Charcoal Supplement for Legionella Agar	Low risk	10/11/2020
DCM-S	FD283R	HiCrome™ Candida Differential Selective Supplement	Low risk	20/12/2012
DCM-S	FD284	Acriflavin-Cefsulodin-Vancomycin Supplement (ACV Supplement)	Low risk	20/12/2012
DCM-S	FD285	Bifidobacterium Selective Supplement	Low risk	20/12/2012
DCM-S	FD286	Yersinia Selective Supplement	Low risk	20/12/2012
DCM-S	FD287	Growth Supplement I for MSM	Low risk	20/12/2012
DCM-S	FD288	Growth Supplement II for MSM	Low risk	20/12/2012

DCM-S	FD290	Novobiocin Selective Supplement	Low risk	20/12/2012
DCM-S	FD295	HiCrome™ ECO157:H7 Selective Supplement Modified	Low risk	22/04/2019
DCM-S	FD299	Selective Supplement for MRSA	Low risk	20/12/2012
DCM-S	FD300	Hayflick Supplement	Low risk	20/12/2012
DCM-S	FD302	Group A Selective Supplement	Low risk	20/12/2012
DCM-S	FD304	Arcobacter Selective Supplement	Low risk	05/11/2020
DCM-S	FD306	Modified Listeria Oxford Selective Supplement	Low risk	22/04/2019
DCM-S	FD309	Monensin Selective Supplement	Low risk	22/04/2019
DCM-S	FD312	VIA Supplement	Low risk	20/12/2012
DCM-S	FD319	MRSA Supplement	Low risk	25/08/2016
DCM-S	FD319R	MeReSa Selective Supplement (MRSA Selective Supplement)	Low risk	25/08/2016
DCM-S	FD320	Clostridium difficile Selective Supplement	Low risk	25/08/2016
DCM-S	FD321	TVCSB Supplement	Low risk	25/08/2016
DCM-S	FD322	Middlebrook ADC Growth Supplement, Modified	Low risk	25/08/2016
DCM-S	FD323	TSBV Supplement	Low risk	25/08/2016
DCM-S	FD324	Bacillus Selective Supplement	Low risk	25/08/2016
DCM-S	FD327	NAD Supplement	Low risk	25/08/2016
DCM-S	FD329	Middlebrook OADC Enrichment Supplement	Low risk	25/08/2016
DCM-S	FD332	Lecithin solution	Low risk	10/11/2020
DCM-S	FD333	Modified L.mono Selective supplement	Low risk	10/11/2020
DCM-S	FD334	Mycoplasma selective supplement	Low risk	25/08/2016
DCM-S	FD335	Leeds Acinetobacter selective supplement	Low risk	25/08/2016
DCM-S	FD335R	MDR Acinetobacter Selective Supplement	Low risk	25/08/2016
DCM-S	FD338	LCN Supplement	Low risk	25/08/2016
DCM-S	FD340	PACT Supplement	Low risk	28/04/2017
DCM-S	FD342	Rapid Listeria Selective Supplement	Low risk	10/11/2020
DCM-S	FD343	Growth Supplement for Fastidious Organism	Low risk	16/12/2017
DCM-S	FD344	ECC Selective Supplement Modified	Low risk	22/04/2019
DCM-S	FD345	Ciprofloxacin Supplement	Low risk	10/11/2020
DCM-S	FD347	PCP Supplement	Low risk	04/07/2018
DCM-S	FD347B	PCP Supplement	Low risk	10/11/2020
DCM-S	FD348	OADS Supplement	Low risk	16/12/2017
DCM-S	FD349	Vancomycin Polymyxin B Supplement	Low risk	04/07/2018
DCM-S	FD352	Acinetobacter Selective Supplement	Low risk	30/10/2018
DCM-S	FD353	VCAT Supplement	Low risk	30/10/2018
DCM-S	FD354	STEC Selective Supplement	Low risk	30/10/2018
DCM-S	FD355	HiCrome™ Colistin Resistant Selective Supplement	Low risk	30/10/2018
DCM-S	FD356	Diphenyl supplement	Low risk	22/04/2019
DCM-S	FD357	Carba Selective Supplement	Low risk	10/11/2020
DCM-S	FD360	C.auris Selective Supplement	Low risk	05/11/2019
DCM-S	FD361	BCSA Selective Supplement	Low risk	05/11/2019

DCM-S	FD362	Coagulase Supplement (for M2126)	Low risk	10/11/2020
DCM-S	FD363	HiMRSA Selective Supplement	Low risk	17/06/2021
DCM-S	FD725R	Mycoprep (Modified,Bulk powder)	Low risk	25/08/2016
DCM-S	FD726	Mycoprep (Modified, powder for 1000ml)	Low risk	25/08/2016
DCM-S	FD743R	Bifido Selective Supplement C	Low risk	25/08/2016
DCM-S	FD744R	Bifido Selective Supplement D	Low risk	25/08/2016
DCM-S	FD745R	Bifido Selective Supplement E	Low risk	25/08/2016
DCM-S	FD749	Supplement for HiCrome™ Candida Agar	Low risk	04/07/2018
DCM-S	FD750	L. J. Media Supplement w/ Capreomycin	Low risk	25/08/2016
DCM-S	FD751	L. J. Medium Supplement w/ Clarithromycin	Low risk	25/08/2016
DCM-S	FD752	L. J. Media Supplement w/ D-Cycloserine	Low risk	25/08/2016
DCM-S	FD753	L. J. Media Supplement w/ Ethambutol	Low risk	25/08/2016
DCM-S	FD754	L. J. Media Supplement w/ Ethionamide	Low risk	25/08/2016
DCM-S	FD755	L. J. Medium Supplement w/ Gatifloxacin	Low risk	25/08/2016
DCM-S	FD756	L. J. Media Supplement w/ Isoniazide	Low risk	25/08/2016
DCM-S	FD757	L. J. Media Supplement w/ Kanamycin	Low risk	25/08/2016
DCM-S	FD758	L. J. Medium Supplement w/ Levofloxacin	Low risk	25/08/2016
DCM-S	FD759	L. J. Medium Supplement w/ Lomefloxacin	Low risk	04/07/2018
DCM-S	FD760	L. J. Medium Supplement w/ Ofloxacin	Low risk	04/07/2018
DCM-S	FD761	L. J. Medium Supplement w/ p-Aminosalicylic acid	Low risk	04/07/2018
DCM-S	FD762	L. J. Medium Supplement w/ Pyrazinamide	Low risk	04/07/2018
DCM-S	FD763	L.J.Medium Supplementw/Rifabutin	Low risk	04/07/2018
DCM-S	FD764	L.J.Medium Supplementw/Rifampicin	Low risk	04/07/2018
DCM-S	FD765	L.J.Medium Supplementw/Sodium Salicylate	Low risk	04/07/2018
DCM-S	FD766	L.J.Medium Supplementw/Streptomycin	Low risk	04/07/2018
DCM-S	FD767	L.J.Medium Supplementw/TCH	Low risk	04/07/2018
DCM-S	FD768	Chloramphenicol Supplement	Low risk	04/07/2018
DCM-S	FD772	L.J. Media Supplement w/Amikacin	Low risk	04/07/2018
DCM-S	FD775	L.J. Media Supplement w/ p-Nitrobenzoic acid	Low risk	04/07/2018
DCM-S	FD780	L.J. Media Supplement w/Moxifloxacin	Low risk	04/07/2018
DCM-S	FD804	Enriched growth Supplement for Mycobacteria	Low risk	04/07/2018
DCM-S	FD805	Growth Supplement for Anaerobic cultures	Low risk	10/11/2020
DCM-S	FD808	Supplement for GC Agar Base	Low risk	10/11/2020
DCM-S	FD812	Selective Supplement for Gram positive bacteria (Clostridium, Staphylococcus spp. etc.)	Low risk	10/11/2020
DCM-S	FD814	PANTA Supplement	Low risk	10/11/2020
DCM-S	FD815B	Selective Supplement for SS Agar	Low risk	10/11/2020
DCM-S	FD816	Selective supplement for Enterobacteriaceae	Low risk	10/11/2020
DCM-S	FD817	Selective Supplement for Staphylococcus	Low risk	10/11/2020
DCM-S	FD820	Selective Supplement for SS Agar	Low risk	10/11/2020



Product group	Type/ Model / Ref number	Device Name	Risk Class	Date of CE compliance
Ready Prepared Media			Low risk	10/06/2021
RPM - Ready Prepared Plates	HB001	HiCombi™ Nutrient - MacConkey Agar Plate	Low risk	20/12/2012
RPM - Ready Prepared Plates	HB003	HiCombi™ CLED - MacConkey Agar Plate	Low risk	20/12/2012
RPM - Ready Prepared Plates	HB004	HiCombi™ XLD - MacConkey Agar Plate	Low risk	20/12/2012
RPM - Ready Prepared Plates	HB005	HiCombi™ Cetrimide - MacConkey Agar Plate	Low risk	20/12/2012
RPM - Ready Prepared Plates	HB006	HiCombi™ Blood- MacConkey Agar Plate	Low risk	20/12/2012
RPM - Ready Prepared Plates	HB007	HiCombi™ MacConkey-Mannitol Salt Agar	Low risk	20/12/2012
RPM - Ready Prepared Plates	HB008	HiCombi™ Blood -Chocolate Agar	Low risk	20/12/2012
RPM - Ready Prepared Plates	HB009	HiCombi™ Blood -Mannitol Salt Agar	Low risk	20/12/2012
RPM - Ready Prepared Plates	HB010	HiCombi™ Chocolate - MacConkey Agar Plate	Low risk	20/12/2012
RPM - Ready Prepared Plates	HB017	HiCombi™ Sabouraud Dextrose-Sheep Blood Agar Plate	Low risk	17/06/2021
RPM- HiDip Slides	HD001	HiDip™ Cled-Cetri-Mac Medium	Low risk	20/12/2012
RPM- HiDip Slides	HD002	HiDip™ Mac-Cled-Sab Medium	Low risk	20/12/2012
RPM- HiDip Slides	HD003	HiDip™ Mac-Cled-Bile Esculin Medium	Low risk	20/12/2012
RPM- HiDip Slides	HD004	HiDip™ Cled-Mac Medium	Low risk	20/12/2012
RPM- HiDip Slides	HD005	HiDip™ Cled-MUG Mac Medium	Low risk	20/12/2012
RPM- HiDip Slides	HD006	HiDip™ Cled-HiCrome™ UTI Medium	Low risk	20/12/2012
RPM- HiDip Slides	HD007	HiDip™ Mac-HiCrome™ UTI Medium	Low risk	20/12/2012
RPM- HiDip Slides	HD007R	HiDip™ Mac-HiCrome™ UTI Medium	Low risk	10/11/2020
RPM- HiDip Slides	HD018	HiDip™ TSA-CLED Agar w/ B.T.B Indicator Medium	Low Risk	20/12/2012
RPM- HiDip Slides	HD020	HiDip™ Pseudomonas Agar - MacConkey Agar Medium	Low risk	20/12/2012
RPM- HiDip Slides	HD021	HiDip™ PCA - MacConkey Agar Medium	Low risk	20/12/2012
RPM- HiDip Slides	HD024	HiDip™ Modified Rogosa Medium-Modified Rogosa Medium	Low risk	20/12/2012
RPM- HiDip Slides	HD025	HiDip™ Modified Nickerson Medium-Modified Nickerson Medium	Low risk	20/12/2012
RPM- HiDip Slides	HD041	HiDip HiCrome™ Universal Agar-PCA	Low risk	28/04/2017
RPM- HiDip Slides	HD042	HiDip HiCrome™ UTI Agar - Dey Engley Neutralizing agar	Low risk	28/04/2017
RPM- HiDip Slides	HD046	HiDip TSA-TCBS	Low risk	30/10/2018
RPM- HiDip Slides	HD047	HiDip TSA-MRS	Low risk	30/10/2018
RPM- HiSafe Blood Culturing System	LQ003	BHI	Low risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ003A	BHI	Low risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ004	BHI - Supplemented w/ 0.05% SPS	Low risk	20/12/2012

RPM- HiSafe Blood Culturing System	LQ004R	BHI - Supplemented w/ 0.05% SPS	Low risk	10/11/2020
RPM- HiSafe Blood Culturing System	LQ004A	BHI - Supplemented w/ 0.05% SPS	Low risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ004AR	BHI - Supplemented w/ 0.05% SPS	Low risk	10/11/2020
RPM- HiSafe Blood Culturing System	LQ005	TSB - Tryptone Soya Broth w/ 10% Sucrose	Low risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ005A	TSB - Tryptone Soya Broth w/ 10% Sucrose	Low risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ006	Columbia Broth	Low risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ006A	Columbia Broth	Low risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ007	Thioglycollate Broth	Low Risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ007R	Thioglycollate Broth	Low Risk	10/11/2020
RPM- HiSafe Blood Culturing System	LQ007A	Thioglycollate Broth	Low Risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ007AR	Thioglycollate Broth	Low Risk	10/11/2020
RPM- HiSafe Blood Culturing System	LQ008	Schaedler Broth	Low Risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ008A	Schaedler Broth	Low Risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ009	TSB - Tryptone Soya Broth	Low risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ009A	TSB - Tryptone Soya Broth	Low risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ010	Glucose Broth Supplemented w/ 0.05% SPS	Low risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ010A	Glucose Broth Supplemented w/ 0.05% SPS	Low risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ010AR	Glucose Broth Supplemented w/ 0.05% SPS	Low risk	10/11/2020
RPM- HiSafe Blood Culturing System	LQ010V	Glucose Broth supplemented w/0.05% SPS	Low risk	22/04/2019
RPM- HiSafe Blood Culturing System	LQ011	TSB - Tryptone Soya Broth Supplemented w/ 0.05% SPS	Low risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ011A	TSB - Tryptone Soya Broth Supplemented w/ 0.05% SPS	Low risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ011AR	TSB - Tryptone Soya Broth Supplemented w/ 0.05% SPS	Low risk	10/11/2020
RPM- HiSafe Blood Culturing System	LQ013V	Hartley Broth	Low risk	22/04/2019
RPM- HiSafe Blood Culturing System	LQ014	Modified Wilkins Chalgren Broth	Low risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ014A	Modified Wilkins Chalgren Broth	Low risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ012	HiCombi™ Dual Performance Medium	Low Risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ012R	HiCombi™ Dual Performance Medium	Low Risk	10/11/2020

RPM- HiSafe Blood Culturing System	LQ013	Hartley Broth	Low Risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ013A	Hartley Broth	Low Risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ023	Fluid thioglycollate Medium w/0.05% SPS	Low Risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ023A	Fluid thioglycollate Medium w/0.05% SPS	Low Risk	20/12/2012
RPM- Ready Prepared Dual Media	LQ029	HiCombi™ Dual Performance Salmonella Medium - SS	Low Risk	20/12/2012
RPM- Ready Prepared Dual Media	LQ029A	HiCombi™ Dual Performance Salmonella Medium - SS	Low Risk	20/12/2012
RPM- Ready Prepared Dual Media	LQ029AR	HiCombi™ Dual Performance Salmonella Medium - SS	Low Risk	10/11/2020
RPM- Ready Prepared Dual Media	LQ030	HiCombi™ Dual Performance Salmonella Medium - XLD	Low risk	20/12/2012
RPM- Ready Prepared Dual Media	LQ030A	HiCombi™ Dual Performance Salmonella Medium - XLD	Low risk	20/12/2012
RPM- Ready Prepared Dual Media	LQ031	HiCombi™ Dual Performance Salmonella Medium - DCA	Low risk	20/12/2012
RPM- Ready Prepared Dual Media	LQ031A	HiCombi™ Dual Performance Salmonella Medium - DCA	Low risk	20/12/2012
RPM- Ready Prepared Dual Media	LQ031AR	HiCombi™ Dual Performance Salmonella Medium - DCA	Low risk	10/11/2020
RPM- Ready Prepared Dual Media	LQ032	HiCombi™ Dual Performance Salmonella Medium - HEA	Low risk	20/12/2012
RPM- Ready Prepared Dual Media	LQ032A	HiCombi™ Dual Performance Salmonella Medium - HEA	Low risk	20/12/2012
RPM- Ready Prepared Dual Media	LQ033	HiCombi™ Dual Performance Medium	Low risk	20/12/2012
RPM- Ready Prepared Dual Media	LQ033R	HiCombi™ Dual Performance Medium	Low risk	10/11/2020
RPM- Ready Prepared Dual Media	LQ034	HiCombi™ Dual Performance Fungal Medium Kit	Low risk	20/12/2012
RPM- Ready Prepared Dual Media	LQ034R	HiCombi™ Dual Performance Fungal Medium Kit	Low Risk	10/11/2020
RPM- Ready Prepared Dual Media	LQ034A	HiCombi™ Dual Performance Fungal Medium Kit	Low Risk	20/12/2012
RPM- Ready Prepared Dual Media	LQ034AR	HiCombi™ Dual Performance Fungal Medium Kit	Low Risk	10/11/2020

RPM- Ready Prepared Dual Media	LQ035	HiCombi™ Dual Performance Selective Medium - HEA	Low risk	20/12/2012
RPM- Ready Prepared Dual Media	LQ035A	HiCombi™ Dual Performance Selective Medium - HEA	Low risk	20/12/2012
RPM- Ready Prepared Dual Media	LQ035AR	HiCombi™ Dual Performance Selective Medium - HEA	Low risk	10/11/2020
RPM- Ready Prepared Dual Media	LQ036	HiCombi™ Dual Performance Selective Medium - SS	Low risk	20/12/2012
RPM- Ready Prepared Dual Media	LQ036R	HiCombi™ Dual Performance Selective Medium - SS	Low risk	10/11/2020
RPM- Ready Prepared Dual Media	LQ036A	HiCombi™ Dual Performance Selective Medium - SS	Low risk	20/12/2012
RPM- Ready Prepared Dual Media	LQ036AR	HiCombi™ Dual Performance Selective Medium - SS	Low risk	10/11/2020
RPM- Ready Prepared Dual Media	LQ037	HiCombi™ Dual Performance Selective Medium - HEA	Low risk	20/12/2012
RPM- Ready Prepared Dual Media	LQ038	HiCombi™ Dual Performance Selective Medium - SS	Low risk	20/12/2012
RPM- Ready Prepared Dual Media	LQ038A	HiCombi™ Dual Performance Selective Medium - SS	Low risk	25/08/2016
RPM- Ready Prepared Liquid Medium	LQ004AI	BHI-Supplemented w/0.05% SPS	Low risk	25/08/2016
RPM- Ready Prepared Liquid Medium	LQ004AL	BHI-Supplemented w/0.05% SPS	Low risk	25/08/2016
RPM- Ready Prepared Liquid Medium	LQ004V	BHI - Supplemented w/ 0.05% SPS	Low risk	25/08/2016
RPM- Ready Prepared Liquid Medium	LQ0151	Medium 11. GN Broth	Low risk	04/07/2018
RPM- Ready Prepared Liquid Medium	LQ069	Alkaline Peptone Water	Low Risk	20/12/2012
RPM- Ready Prepared Liquid Medium	LQ069R	Enrichment Medium For Vibrio	Low Risk	25/08/2016
RPM- Ready Prepared Liquid Medium	LQ070	Selenite Broth	Low risk	20/12/2012
RPM- Ready Prepared Liquid Medium	LQ070V	Selenite Broth	Low Risk	25/08/2016

RPM- Ready Prepared Liquid Medium	LQ077	BHI Broth	Low risk	20/12/2012
RPM- Ready Prepared Liquid Medium	LQ077V	BHI Broth	Low risk	20/12/2012
RPM- Ready Prepared Liquid Medium	LQ077R	Enrichment Medium	Low risk	25/08/2016
RPM- Ready Prepared Liquid Medium	LQ079	Bile Broth	Low Risk	20/12/2012
RPM- Ready Prepared Liquid Medium	LQ079V	Bile Broth	Low Risk	22/04/2019
RPM- Ready Prepared Liquid Medium	LQ080	Cooked M Medium	Low Risk	20/12/2012
RPM- Ready Prepared Liquid Medium	LQ080C	Cooked M Medium	Low Risk	04/07/2018
RPM- Ready Prepared Liquid Medium	LQ080V	Cooked M Medium	Low Risk	20/12/2012
RPM- Ready Prepared Liquid Medium	LQ088	Tetrathionate Broth	Low risk	20/12/2012
RPM- Ready Prepared Liquid Medium	LQ089	Peptone Water	Low risk	04/07/2018
RPM- Ready Prepared Liquid Medium	LQ089X	Peptone Water	Low risk	04/07/2018
RPM- Ready Prepared Liquid Medium	LQ093	Cooked M Medium w/ Glucose, Hemin & Vitamin K	Low Risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ095	Hartley Broth w/ 0.05% SPS	Low Risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ095A	Hartley Broth w/ 0.05% SPS	Low Risk	20/12/2012
RPM- Ready Prepared Liquid Medium	LQ104	Rappaport Vassiliadis Salmonella Enrichment Broth	Low Risk	20/12/2012
RPM- Ready Prepared Liquid Medium	LQ104C	Rappaport Vassiliadis Salmonella Enrichment Broth	Low Risk	04/07/2018
RPM- Ready Prepared Liquid Medium	LQ104V	Rappaport Vassiliadis Salmonella Enrichment Broth	Low Risk	20/12/2012
RPM- Ready Prepared Liquid Medium	LQ104XX	Rappaport Vassiliadis Salmonella Enrichment Broth	Low Risk	28/04/2017
RPM- Ready Prepared Liquid Medium	LQ105	Kirchner Medium Base	Low Risk	20/12/2012

RPM- Ready Prepared Dual Media	LQ109	HiCombi™ Dual Performance Trans Isolate Medium	Low risk	20/12/2012
RPM- Ready Prepared Dual Media	LQ109R	HiCombi™ Dual Performance Trans Isolate Medium	Low risk	10/11/2020
RPM- Ready Prepared Liquid Medium	LQ126	Urea Indole Medium	Low risk	04/07/2018
RPM- Ready Prepared Liquid Medium	LQ129	Sabouraud's Dextrose Broth	Low risk	04/07/2018
RPM- Ready Prepared Liquid Medium	LQ129V	Sabouraud's Dextrose Broth	Low risk	25/08/2016
RPM- Ready Prepared Liquid Medium	LQ132	Campylo Thioglycollate Broth w/Selective Supplement	Low Risk	20/12/2012
RPM- Ready Prepared Liquid Medium	LQ134	L Broth	Low Risk	20/12/2012
RPM- Ready Prepared Liquid Medium	LQ146	Mannitol Selenite Broth	Low risk	20/12/2012
RPM- Ready Prepared Liquid Medium	LQ157	GN Broth, Hajna	Low risk	20/12/2012
RPM- Ready Prepared Liquid Medium	LQ159	Hayflick Medium	Low risk	20/12/2012
RPM- Ready Prepared Liquid Medium	LQ170	Selective Enrichment Medium For Group B	Low risk	25/08/2016
RPM- Ready Prepared Liquid Medium	LQ180V	Brucella Broth	Low risk	20/12/2012
RPM- Ready Prepared Liquid Medium	LQ181V	Mannitol Salt Broth	Low risk	20/12/2012
RPM- Ready Prepared Liquid Medium	LQ182V	Mueller Hinton Broth	Low risk	20/12/2012
RPM- Ready Prepared Liquid Medium	LQ296X	Hugh Leifson Medium	Low risk	10/11/2020
RPM- HiSafe Blood Culturing System	LQ188	HiCombi™ Dual Performance Fungal Medium, Modified	Low risk	20/12/2012
RPM- HiSafe Blood Culturing System	LQ208	Eugonic LT100 Broth	Low Risk	22/04/2019
RPM- Ready Prepared Liquid Medium	LQ208L	Eugonic LT100 Broth	Low risk	28/04/2017
RPM- Ready Prepared Liquid Medium	LQ208CCL	Eugonic LT100 Broth	Low risk	28/04/2017

RPM- Ready Prepared Liquid Medium	LQ210C	BHI Broth	Low risk	20/12/2012
RPM- Ready Prepared Liquid Medium	LQ210D	BHI Broth	Low risk	20/12/2012
RPM- Ready Prepared Dual Media	LQ241	HiCombi Trans Isolate Medium	Low risk	28/04/2017
RPM- Ready Prepared Liquid Medium	LQ246CCL	Sauton's Fluid Medium Base	Low risk	16/12/2017
RPM- Ready Prepared Liquid Medium	LQ314II	HiMiC™ Diluent	Low risk	10/11/2020
RPM- Ready Prepared Liquid Medium	LQ319V	Thioglycollate Medium with Hemin & Vitamin K	Low risk	17/06/2021
RPM- Ready Prepared Liquid Medium	LQ319VIII	Thioglycollate Medium with Hemin & Vitamin K	Low risk	17/06/2021
RPM- Ready Prepared Liquid Medium	LQ089CCLR	Peptone Water	Low risk	17/06/2021
RPM -Ready Prepared Plates	MP001	Nutrient Agar Plate	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP001L	Nutrient Agar Plate (150mm plate)	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP015	Hoyles Media Plate with supplements.	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP016	Brilliant Green Agar, Modified Plate	Low Risk	30/10/2018
RPM -Ready Prepared Plates	MP022	EMB Agar, Levine Plate	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP023	Vogel Johnson Agar Plate (V.J. Agar Plate)	Low Risk	22/04/2019
RPM -Ready Prepared Plates	MP024	Cetrimide Agar Plate	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP029	Endo Agar Plate	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP031	Xylose Lysine Deoxycholate Agar (XLD Agar) Plate	Low risk	20/12/2012
RPM -Ready Prepared Plates	MP043	Baird Parker Agar Plate	Low risk	25/08/2016
RPM -Ready Prepared Plates	MP043L	Baird Parker Agar Plate	Low risk	04/07/2018
RPM -Ready Prepared Plates	MP043M	Baird Parker Agar Plate (150mm)	Low risk	16/12/2017
RPM -Ready Prepared Plates	MP049	Violet Red Bile Agar Plate	Low risk	16/12/2017
RPM -Ready Prepared Plates	MP063	Sabouraud Dextrose Agar Plate	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP063L	Sabouraud Dextrose Agar Plate (150 mm plate)	Low Risk	20/12/2012

RPM -Ready Prepared Plates	MP063M	Sabouraud Dextrose Agar Plate (120 mm plate)	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP065	Deoxycholate Citrate Agar Plate	Low Risk	30/10/2018
RPM -Ready Prepared Plates	MP073	Blood Agar Plate	Low risk	10/11/2020
RPM -Ready Prepared Plates	MP074	Brucella Agar Plate	Low Risk	22/04/2019
RPM -Ready Prepared Plates	MP081	MacConkey Agar w/ 0.15% Bile Salts, CV and NaCl Plate	Low risk	20/12/2012
RPM -Ready Prepared Plates	MP081XL	MacConkey Agar w/ 0.15% Bile Salts, CV and NaCl Plate (200mm plate)	Low risk	20/12/2012
RPM -Ready Prepared Plates	MP082	MacConkey Agar w/o CV, NaCl w/ 0.5% Sodium Taurocholate Plate	Low risk	20/12/2012
RPM -Ready Prepared Plates	MP091	Plate Count Agar Plate	Low risk	16/12/2017
RPM -Ready Prepared Plates	MP103	Chocolate Agar Plate	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP108	SS Agar (Salmonella Shigella Agar) Plate	Low risk	20/12/2012
RPM -Ready Prepared Plates	MP1032	SS Agar Plate, Modified (Salmonella Shigella Agar Plate, Modified)	Low risk	10/11/2020
RPM -Ready Prepared Plates	MP1039	Brucella Agar Plate with Hemin & Vitamin K1	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP1057	G. vaginalis Selective Agar Plate	Low Risk	30/10/2018
RPM -Ready Prepared Plates	MP1067	Sabouraud Chloramphenicol Agar Plate	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP1084	Mueller Hinton Agar No. 2 Plate	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP1084HB	Mueller Hinton Agar No.2 Plate w/ Horse Blood	Low risk	10/11/2020
RPM -Ready Prepared Plates	MP1084SB	Mueller Hinton Agar No.2 Plate w/ Sheep Blood	Low risk	10/11/2020
RPM -Ready Prepared Plates	MP1139	Modified MYP Agar Plate	Low risk	10/11/2020
RPM -Ready Prepared Plates	MP118	Mannitol Salt Agar Plate	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP1259	Haemophilus Test Agar Plate	Low Risk	30/10/2018
RPM -Ready Prepared Plates	MP1260	Tellurite Blood Agar Plate	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP1295	HiCrome™ E.coli Agar Plate	Low risk	10/11/2020
RPM -Ready Prepared Plates	MP1297A	HiCrome™™ Candida Differential Agar Plate	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP1301	Sheep Blood Agar Plate	Low risk	20/12/2012
RPM -Ready Prepared Plates	MP1301C	Sheep Blood Agar Plate (Individually Packed)	Low risk	28/04/2017
RPM -Ready Prepared Plates	MP1301M	Sheep Blood Agar Plate	Low risk	04/07/2018
RPM -Ready Prepared Plates	MP1345	Anaerobic Blood Agar Plate w/Neomycin	Low risk	30/10/2018

RPM -Ready Prepared Plates	MP1353	HiCrome™ UTI Agar Plate	Low risk	20/12/2012
RPM -Ready Prepared Plates	MP137	Malt Extract Agar Plate	Low risk	30/10/2018
RPM -Ready Prepared Plates	MP144	Columbia 5% Sheep Blood Agar Plate	Low risk	20/12/2012
RPM -Ready Prepared Plates	MP1418	HiCrome™ UTI Agar Plate, Modified	Low risk	10/11/2020
RPM -Ready Prepared Plates	MP1454	Oxacillin Resistant Screening Agar Plate	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP1540I	HiCrome™ Listeria Ottaviani Agosti Agar Plate	Low Risk	17/06/2021
RPM -Ready Prepared Plates	MP1548	Chocolate No. 2 Agar Plate	Low risk	10/11/2020
RPM -Ready Prepared Plates	MP1594	MeReSa Agar Plate	Low Risk	30/10/2018
RPM -Ready Prepared Plates	MP160	DCLS Agar Plate	Low Risk	30/10/2018
RPM -Ready Prepared Plates	MP1600	HiCrome™ Universal Agar Plate	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP1640	Burkholderia Cepacia Agar Plate	Low Risk	04/07/2018
RPM -Ready Prepared Plates	MP1674	HiCrome™ MeReSa Agar Plate	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP1682	HiCrome™ Vibrio Agar Plate	Low Risk	17/06/2021
RPM -Ready Prepared Plates	MP1702	MacConkey Agar RS Plate	Low Risk	30/10/2018
RPM -Ready Prepared Plates	MP173	Mueller Hinton Agar Plate	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP173C	Mueller Hinton Agar Plate (100 mm Plate)	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP173L	Mueller Hinton Agar Plate (150mm plate)	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP173M	Mueller Hinton Agar Plate (120mm plate)	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP173XL	Mueller Hinton Agar Plate (200mm plate)	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP173SP	Mueller Hinton Agar Plate (150 mm scored plate)	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP175	Bordet Gengou Agar Plate w/15% Sheep blood	Low Risk	25/08/2016
RPM -Ready Prepared Plates	MP175SB	Bordet Gengou Agar Plate with 25% Sheep Blood	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP1763	VRE Agar Plate	Low Risk	30/10/2018
RPM -Ready Prepared Plates	MP180	Lead Acetate Agar Plate	Low risk	20/12/2012
RPM -Ready Prepared Plates	MP1806	Mueller Hinton Agar plate w/ 5% Sheep Blood	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP1806M	Mueller Hinton Agar plate w/ 5% Sheep Blood	Low Risk	04/07/2018
RPM -Ready Prepared Plates	MP1811	OFBL Agar Plate (Oxidation Fermentation Polymyxin Bacitracin Lactose Agar Plate)	Low risk	10/11/2020

RPM -Ready Prepared Plates	MP1825	Mueller Hinton Agar Plate with 2% Glucose w/Methylene Blue	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP1829	HiCrome™ ESBL Agar Plate	Low Risk	30/10/2018
RPM -Ready Prepared Plates	MP1831	HiCrome™ KPC Agar Plate	Low Risk	28/04/2017
RPM -Ready Prepared Plates	MP1837	HiCrome™ Staph Agar Plate, Modified	Low Risk	28/04/2017
RPM -Ready Prepared Plates	MP1858	Bifidobacterium Agar Modified Plate	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP188	D.T.M Agar Plate	Low Risk	30/10/2018
RPM -Ready Prepared Plates	MP1832	HiCrome™ Coliform Agar Plate, Modified	Low risk	10/11/2020
RPM -Ready Prepared Plates	MP1925	HiCrome™ VRE Agar Plate	Low Risk	30/10/2018
RPM -Ready Prepared Plates	MP1938	HiCrome™ Acinetobacter Agar Plate	Low Risk	16/12/2017
RPM -Ready Prepared Plates	MP1947	Enriched Tryptone Soya Agar Plate (ETSA)	Low risk	20/12/2012
RPM -Ready Prepared Plates	MP1948	Tryptone Soya Serum Bacitracin Vancomycin Agar (TSBV)	Low risk	20/12/2012
RPM -Ready Prepared Plates	MP1949	Tryptone Soya Agar w/ Hemin & Menadione	Low risk	20/12/2012
RPM -Ready Prepared Plates	MP1966	HiCrome™ Strep B Selective Agar Plate	Low risk	30/10/2018
RPM -Ready Prepared Plates	MP1974	HiCrome™ Rapid MRSA Agar Plate	Low risk	25/08/2016
RPM -Ready Prepared Plates	MP2062I	HiCrome™ Cronobacter Isolation Agar Plate (CCI Agar Plate)	Low risk	17/06/2021
RPM -Ready Prepared Plates	MP2085	Martin Lewin Agar	Low risk	30/10/2018
RPM -Ready Prepared Plates	MP2089	Burkholderia cepacia Selective Agar Plate	Low risk	10/11/2020
RPM -Ready Prepared Plates	MP211	BHI Agar Plate	Low risk	20/12/2012
RPM -Ready Prepared Plates	MP2116	HiCrome™ Salmoconfirm Selective Agar Plate	Low risk	17/06/2021
RPM -Ready Prepared Plates	MP217	Bi.G.G.Y. Agar Plate (Nickerson Agar Plate)	Low risk	20/12/2012
RPM -Ready Prepared Plates	MP291	Schaedler Agar Plate	Low risk	16/12/2017
RPM -Ready Prepared Plates	MP1296	HiCrome™ Salmonella Agar Plate	Low risk	30/10/2018
RPM -Ready Prepared Plates	MP298	MacConkey Sorbitol Agar Plate	Low risk	16/12/2017
RPM -Ready Prepared Plates	MP317	EMB Agar Plate	Low risk	20/12/2012
RPM -Ready Prepared Plates	MP406	Pseudomonas Isolation Agar Plate	Low risk	30/10/2018
RPM -Ready Prepared Plates	MP413	Thayer Martin Agar Plate w/VCNT	Low risk	16/12/2017
RPM -Ready Prepared Plates	MP467	Hektoen Enteric Agar Plate	Low risk	04/07/2018

RPM -Ready Prepared Plates	MP491	Anaerobic Agar (Brewer) Plate	Low risk	04/07/2018
RPM -Ready Prepared Plates	MP540	Phenylethyl Blood Agar Plate w/ 5% Sheep Blood	Low risk	25/08/2016
RPM -Ready Prepared Plates	MP5269	Modified Nickerson Medium	Low risk	30/10/2018
RPM -Ready Prepared Plates	MP5208	CNA Agar Plate with 5% Sheep Blood	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP5304	Blood agar Plate w/5mg/l Gentamicin	Low risk	25/08/2016
RPM -Ready Prepared Plates	MP5316	Chocolate Agar Plate w/ 5% Sheep Blood	Low risk	28/04/2017
RPM -Ready Prepared Plates	MP5332	Sabouraud Dextrose Agar Plate w/Chloramphenicol & gentamicin	Low risk	04/07/2018
RPM -Ready Prepared Plates	MP5333	Chocolate Agar Plate w/ Bacitracin	Low risk	04/07/2018
RPM -Ready Prepared Plates	MP5334	Sabouraud Dextrose Agar plate w/Penicillin & Streptomycin	Low risk	04/07/2018
RPM -Ready Prepared Plates	MP5339	Regan Lowe Agar Plate (Charcoal Blood Plate w/Cephalexin)	Low risk	16/12/2017
RPM -Ready Prepared Plates	MP5340	Bordet Gengou Blood Agar Plate w/Cephalexin	Low risk	16/12/2017
RPM -Ready Prepared Plates	MP5380	BHI Agar Plate w/ Blood	Low risk	30/10/2018
RPM -Ready Prepared Plates	MP5381	BHI Agar Plate w/ Vancomycin	Low risk	30/10/2018
RPM -Ready Prepared Plates	MP5382	BHI Blood agar plate w/ Vancomycin	Low risk	30/10/2018
RPM -Ready Prepared Plates	MP5383	BCYE Selective Agar Plate	Low risk	30/10/2018
RPM -Ready Prepared Plates	MP5384	GBS Agar	Low risk	30/10/2018
RPM -Ready Prepared Plates	MP5386	Sabouraud Dextrose Agar Plate w/Gentamicin	Low risk	30/10/2018
RPM -Ready Prepared Plates	MP5387	Sabouraud Dextrose Agar Plate w/ Cycloheximide	Low risk	30/10/2018
RPM -Ready Prepared Plates	MP5389	Mueller Hinton Agar Plate w/ 2% NaCL	Low risk	30/10/2018
RPM -Ready Prepared Plates	MP5390	Helicobacter Pylori Selective Agar	Low risk	30/10/2018
RPM -Ready Prepared Plates	MP5476	Mucormycosis Selective Agar Plate	Low risk	10/06/2021
RPM -Ready Prepared Plates	MP5477	Candida Selective Agar Plate	Low risk	10/06/2021
RPM -Ready Prepared Plates	MP511	Middlebrook 7H11 Agar w/TCH	Low risk	04/07/2018
RPM -Ready Prepared Plates	MP5426	Middlebrook 7H11 Agar w/ PANTA supplement	Low risk	10/11/2020
RPM -Ready Prepared Plates	MP616	Tergitol-7 Agar Plate	Low risk	25/08/2016
RPM -Ready Prepared Plates	MP641	MRS Agar Plate	Low risk	28/04/2017
RPM -Ready Prepared Plates	MP636C	MYP Agar Plate (100mm plate)	Low risk	10/11/2020

RPM -Ready Prepared Plates	MP641-I	MRS Agar w/ 10 ppm cycloheximide	Low risk	28/04/2017
RPM -Ready Prepared Plates	MP664	Sabouraud Dextrose Agar Plate w/Chloramphenicol (50mg/L) and Cycloheximide 500mg/L	Low Risk	20/12/2012
RPM -Ready Prepared Plates	MP792	CLED Agar w/ Bromothymol Blue Plate	Low risk	20/12/2012
RPM -Ready Prepared Plates	MP805	Bacteroides Bile Esculin Agar Plate	Low risk	25/08/2016
RPM -Ready Prepared Plates	MP813I	BCYE Agar Plate	Low risk	30/10/2018
RPM -Ready Prepared Plates	MP843	Yersinia Selective Agar Plate	Low risk	30/10/2018
RPM -Ready Prepared Plates	MP870	TCBS Agar Plate	Low risk	25/08/2016
RPM -Ready Prepared Plates	MP975A	Anaerobic Blood Agar Plate	Low risk	25/08/2016
RPM -Ready Prepared Plates	MP994	Campylobacter Agar Plate	Low risk	20/12/2012
RPM -Ready Prepared Plates	MPV081	MacConkey HiVeg™ Agar Plate w/ CV, NaCl, 0.003% NR and 1.5% Agar Plate	Low risk	10/11/2020
RPM -Ready Prepared Plates	MPV173	Mueller Hinton HiVeg™ Agar Plate	Low risk	10/11/2020
RPM -Ready Prepared Plates	QP001	Middlebrooke 7H11 Agar Plate	Low risk	04/07/2018
RPM- Transport Medium w/ swabs	MQ651P	HiCulture™ Transport Swabs w/ Amies Medium w/ Charcoal	Low risk	20/12/2012
RPM- Transport Medium w/ swabs	MQ5203P	HiCulture™ Transport Swab w/ Enteric Pathogen Transport Medium	Low risk	20/12/2012
RPM- Transport Medium w/ swabs	MQ306P	HiCulture™ Transport Swabs w/ Stuart Transport Medium	Low risk	20/12/2012
RPM- Viral Transport Medium w/ swabs	AL167	HiViral Transport Medium	Low risk	20/12/2012
RPM- Viral Transport Medium w/ swabs	MS052A	HiCulture™ Transport Swabs w/Selenite Medium (A)	Low risk	25/08/2016
RPM- Viral Transport Medium w/ swabs	MS316	HiCulture™ Transport Swabs w/CVTR Medium	Low risk	20/12/2012
RPM- Viral Transport Medium w/ swabs	MS316S	HiCulture™ Transport Swabs w/CVTR Medium	Low risk	10/11/2020
RPM- Viral Transport Medium w/ swabs	MS316SR	HiCulture™ Transport Swabs w/CVTR Medium w/metal stick	Low risk	10/11/2020
RPM- Viral Transport Medium w/ swabs	MS316A	HiCulture™ Transport Swabs w/CVTR Medium,Modified	Low risk	25/08/2016
RPM- Viral Transport Medium w/ swabs	MS1145	HiCulture™ Listeria Isolation and Transport Swabs	Low risk	20/12/2012
RPM- Viral Transport Medium w/ swabs	MS1145R	HiCulture™ Listeria Isolation and Transport Swabs	Low risk	10/11/2020

RPM- Viral Transport Medium w/ swabs	MS1145S	HiCulture™ Listeria Isolation and Transport Swabs with metal stick	Low risk	20/12/2012
RPM- Transport Medium w/ swabs	MS1514	Hiculture™ Transport swabs w/Modified Campylobacter Thioglycollate Medium	Low risk	25/08/2016
RPM- Transport Medium w/ swabs	MS1514R	Hiculture™ Transport swabs w/Modified Campylobacter Thioglycollate Medium in polystyrene tube	Low risk	10/11/2020
RPM- Transport Medium w/ swabs	MS1557	Hiculture™ Transport swabs w/BHI broth for H.pylori	Low risk	25/08/2016
RPM- Transport Medium w/ swabs	MS1759	Hiculture™ Transport swabs	Low risk	25/08/2016
RPM- Transport Medium w/ swabs	MS2016A	HiCulture™ Transport Swabs w/ Soyabean Casein Digest Medium w/6.5% NaCL	Low risk	25/08/2016
RPM- Transport Medium w/ swabs	MS2016B	HiCulture™ Transport Swabs w/ Soyabean Casein Digest Medium w/6.5% NaCL	Low risk	25/08/2016
RPM- Transport Medium w/ swabs	MS202	HiCulture™ Transport Swabs w/ Cary Blair Medium	Low risk	20/12/2012
RPM- Transport Medium w/ swabs	MS202A	HiCulture™ Transport Swabs w/ Cary Blair Medium (A)	Low risk	20/12/2012
RPM- Transport Medium w/ swabs	MS202R	HiCulture™ Transport Swabs w/ Cary Blair Medium in polystyrene tube	Low risk	10/11/2020
RPM- Transport Medium w/ swabs	MS202S	HiCulture™ Transport Swabs w/ Cary Blair Medium with metal stick	Low risk	20/12/2012
RPM- Transport Medium w/ swabs	MS2055	HiCulture™ Transport Medium for Helicobacter pylori	Low risk	28/04/2017
RPM- Transport Medium w/ swabs	MS2127	HiCulture™ Transport Swab w/ Todd Hewitt Broth w/Colistin & Nalidixic Acid	Low risk	10/11/2020
RPM- Transport Medium w/ swabs	MS306	HiCulture™ Transport Swabs w/ Stuart Transport Medium	Low risk	20/12/2012
RPM- Transport Medium w/ swabs	MS306R	HiCulture™ Transport Swabs w/ Stuart Transport Medium	Low risk	10/11/2020
RPM- Transport Medium w/ swabs	MS306S	HiCulture™ Transport Swabs w/ Stuart Transport Medium with metal stick	Low risk	20/12/2012
RPM- Transport Medium w/ swabs	MS5002	HiCulture™ Transport Swabs w/ 0.85% Sodium chloride and 0.1% Buffered Ppetone Water in polystyrene tube	Low risk	04/07/2018
RPM- Transport Medium w/ swabs	MS5215	HiViral™ Transport Medium for Cloacal Samples	Low risk	25/08/2016
RPM- Transport Medium w/ swabs	MS5296	HiCulture™ Skim Milk Tryptone Glucose Glycerin Medium swabs	Low risk	25/08/2016
RPM- Transport Medium w/ swabs	MS5321	HiCulture Sterile swabs w/ 0.9% Saline	Low risk	22/04/2019
RPM- Transport Medium w/ swabs	MS651	HiCulture™ Transport Swabs w/ Amies Medium w/ Charcoal	Low risk	20/12/2012
RPM- Transport Medium w/ swabs	MS651R	HiCulture™ Transport Swabs w/ Amies Medium w/ Charcoal in polystyrene tube	Low risk	10/11/2020
RPM- Transport Medium w/ swabs	MS651S	HiCulture™ Transport Swabs w/ Amies Medium w/ Charcoal with metal stick	Low risk	20/12/2012
RPM- Transport Medium w/ swabs	MS651SR	HiCulture™ Transport Swabs w/ Amies Medium w/ Charcoal with metal stick	Low risk	10/11/2020
RPM- Transport Medium w/ swabs	MS684	HiCulture™ Transport Swabs w/ Amies Medium w/o Charcoal	Low risk	20/12/2012
RPM- Transport Medium w/ swabs	MS684R	HiCulture™ Transport Swabs w/ Amies Medium w/o Charcoal in polystyrene tube	Low risk	10/11/2020
RPM- Transport Medium w/ swabs	MS684A	HiCulture™ Transport Swabs w/ Amies Medium (A)	Low risk	25/08/2016

RPM- Transport Medium w/ swabs	MS684B	HiCulture™ Transport Swabs w/ Amies Medium (B)	Low risk	25/08/2016
RPM- Transport Medium w/ swabs	MS684C	HiCulture™ Transport Swabs w/ Amies Medium (C)	Low risk	25/08/2016
RPM- Transport Medium w/ swabs	MS684D	HiCulture™ Transport Swabs w/ Amies Medium (D)	Low risk	25/08/2016
RPM- Transport Medium w/ swabs	MS684S	HiCulture™ Transport Swabs w/ Amies Medium w/o Charcoal with metal stick	Low risk	20/12/2012
RPM- Transport Medium w/ swabs	MS010	HiCulture™ Transport Swabs w/ Alternative Thioglycollate Medium	Low risk	20/12/2012
RPM- Transport Medium w/ swabs	MS010R	HiCulture™ Transport Swabs w/ Alternative Thioglycollate Medium in polystyrene tube	Low risk	10/11/2020
RPM- Transport Medium w/ swabs	MS010S	HiCulture™ Transport Swabs w/ Alternative Thioglycollate Medium with metal stick	Low risk	20/12/2012
RPM- Transport Medium w/ swabs	MS113	HiCulture™ Transport Swabs w/ Chlamyospore Medium	Low risk	20/12/2012
RPM- Transport Medium w/ swabs	MS113R	HiCulture™ Transport Swabs w/ Chlamyospore Medium in polystyrene tube	Low risk	10/11/2020
RPM- Transport Medium w/ swabs	MS113S	HiCulture™ Transport Swabs w/ Chlamyospore Medium with metal stick	Low risk	20/12/2012
RPM- Transport Medium w/ swabs	MS198S	HiCulture™ Transport Swab w/ Middlebrook 7H9 Broth w/metal stick	Low risk	20/12/2012
RPM- Transport Medium w/ swabs	MS5478	HiFungal Transport medium w/ Swab	Low risk	10/06/2021
RPM- Ready Prepared Medium	MT001	Modified Middlebrook 7H9 Broth with Indicator	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL001	L.J. Medium Slant	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL001H	L.J. Medium in glass bottle	Low risk	04/07/2018
RPM- L.J.Medium Slants	SL001B	L.J. Medium Slant	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL001L	L.J. Medium Slant in long tube	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL001LD	L.J. Medium Slant (in long tube)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL001M	L.J.Medium Slant (In Medium Length tube)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL001T	L.J. Medium Slant in thick glass bottles	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL001X	L.J. Medium Slant	Low risk	17/06/2021
RPM- L.J.Medium Slants	SL002	L.J.Medium Kit	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL003	L.J.Medium Plus Kit	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL004	L.J.Medium w/ Pyruvate	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL004L	L.J.Medium w/ Pyruvate (0.2%)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL005	L.J.Medium w/ Streptomycin (4 mcg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL005L	L.J.Medium w/Streptomycin (4 mcg / ml)	Low risk	20/12/2012

RPM- L.J.Medium Slants	SL006	L.J.Medium w/ INH	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL007	L.J.Medium Slant w/ Rifampicin (40µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL008	Acid Egg Medium Slant	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL009	Acid Egg Medium Slant w/ pyruvate	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL010	Modified L. J. Medium Plus Kit	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL011	L.J. Medium Slant w/ Ciprofloxacin	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL011L	L.J. Medium Slant w/ Ciprofloxacin (12.5 mcg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL012	L.J. Medium Slant w/ Amikacin	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL013	L.J. Medium Slant w/ Clarithromycin	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL014	L.J. Medium Slant w/Ethionamide (20µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL015	L.J. Medium Slant w/Rifabutin (0.5 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL016	L. J. Medium Plus Kit w/ kanamycin µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL017	L.J. Medium Slant w/ D-Cycloserine (30 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL017L	L.J. Medium Slant w/ D-Cycloserine (30 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL018	L.J.Medium w/Pyrazinamide of pH 5.5	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL018L	L.J. Medium Slant w/ Pyrazinamide pH 5.5	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL019	L.M. Slant (Loeffler Medium)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL020	L.J. Medium w/TCH	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL021	L.J. Medium Slant w/ p-Nitrobenzoic acid (500 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL021L	L.J. Medium Slant w/ p-Nitrobenzoic acid	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL022	L.J. Medium Slant w/o Glycerol	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL023	Tuberculosis First Line Kit (Total 7 slants)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL023L	Tuberculosis First Line Kit (Total 7 slants)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL023LD	Tuberculosis First Line Kit (Total 7slants)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL023R	Tuberculosis First Line Kit (Total 7 slants)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL024	Tuberculosis Second Line Kit (Total 10 slants)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL024L	Tuberculosis Second Line Kit (Total 10 slants)	Low risk	20/12/2012

RPM- L.J.Medium Slants	SL024LD	Tuberculosis Second Line Kit (Total 10 slants)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL024R	Tuberculosis Second Line Kit (Total 8 slants)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL025	Dorset Egg Medium Slant	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL026	L.J. Medium Slant w/Streptomycin (5mcg)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL027	L.J. Medium Slant w/Ethambutol (2mcg)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL029	L.J. Medium Slant w/P-Amino Salicylic acid	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL029L	L.J. Medium Slant w/ p-Aminosalicylic acid	Low risk	20/12/2012
RPM- Ready Prepared Slants	SL031	Dermatophyte Test Medium Slant	Low risk	20/12/2012
RPM- Ready Prepared Slants	SL032	Kligler Iron Agar Slant	Low risk	20/12/2012
RPM- Ready Prepared Slants	SL033	Motility Indole Lysine Agar Slant	Low risk	20/12/2012
RPM- Ready Prepared Slants	SL034	Simmons Citrate Agar Slant	Low risk	20/12/2012
RPM- Ready Prepared Slants	SL034T	Simmon Citrate Agar Slant in long tubes	Low risk	20/12/2012
RPM- Ready Prepared Slants	SL035	Urea Agar Slant	Low risk	20/12/2012
RPM- Ready Prepared Slants	SL035T	Urea Agar Slant in Tube	Low risk	20/12/2012
RPM- Ready Prepared Slants	SL036	Sabouraud Dextrose Agar Slant	Low risk	20/12/2012
RPM- Ready Prepared Slants	SL036L	Sabouraud Dextrose Agar Slant	Low risk	08/12/2017
RPM- L.J.Medium Slants	SL037	Tuberculosis First Line Plus Kit (Total 9 slants)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL037R	Tuberculosis First Line Plus Kit (9 slants)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL038	Tuberculosis Second Line Plus Kit (Total 11 slants)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL038R	Tuberculosis Second Line Plus Kit (11 slants)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL038U	Lowenstein - Jensen Medium Slant with tu	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL040	L.J. Medium Slant w/ Moxifloxacin	Low risk	20/12/2012
RPM- Ready Prepared Slants	SL041	Gelatin Agar Slant	Low risk	20/12/2012
RPM- Ready Prepared Slants	SL042	MIU Medium Slant	Low risk	20/12/2012
RPM- Ready Prepared Slants	SL043	Nitrate Agar Slant	Low risk	20/12/2012
RPM- Ready Prepared Slants	SL044	Phenyl Alanine Agar Slant	Low risk	20/12/2012
RPM- Ready Prepared Slants	SL045	Triple Sugar Iron Agar Slant	Low risk	20/12/2012

RPM- Ready Prepared Slants	SL045T	Triple Sugar Iron Agar Slant in Tube	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL047	L.J.Medium Slant w/ Ethambutol (2µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL049	L.J. Medium Slant w/ Ofloxacin (2 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL049L	L.J Medium Slant w/ Ofloxacin (2µg/ml) (long tube)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL055L	L.J.Medium Slant w/ Isoniazide (0.2 mcg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL061	L.J. Medium Slant w/ Pyrazinamide (50 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL066	L.J. Medium Slant w/ Capreomycin (20 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL067	L.J. Medium Slant w/ Capreomycin (40 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL067L	L.J Medium Slant w/ Capreomycin (40 µg/ml) (long tube)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL067X	L.J Medium Slant w/ Capreomycin (40 µg/ml)	Low risk	17/06/2021
RPM- L.J.Medium Slants	SL070	L.J. Medium Slant w/ D-Cycloserine (40 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL071	L.J. Medium Slant w/ Ethambutol (4 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL072	L.J. Medium Slant w/ Ethambutol (5 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL076	L.J. Medium Slant w/Ethionamide (40µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL078	L.J. Medium Slant w/ Isoniazide (0.2 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL079	L.J. Medium Slant w/ Isoniazide (5 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL081	L.J. Medium Slant w/ Kanamycin (20 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL081L	L.J. Medium Slant w/ Kanamycin (20µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL082	L.J. Medium Slant w/ Kanamycin (30 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL091	L.J. Medium Slant w/ p-Aminosalicylic acid (0.25 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL092	L.J. Medium Slant w/ p-Aminosalicylic acid (0.5 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL092L	L.J. Medium Slant w/ p-Aminosalicylic acid	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL094	L.J. Medium Slant w/ Ciprofloxacin 2µg/ml	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL098	L.J. Medium Slant w/ Pyruvate (0.2%)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL099	L.J.Medium Slants w/ Isoniazid (0.2 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL105L	L.J.Medium Slant w/ Rifampicin (20mcg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL107	L.J. Medium Slant w/ Rifampicin (50 µg/ml)	Low risk	20/12/2012

RPM- L.J.Medium Slants	SL109	L.J. Medium Slant w/ Streptomycin (8 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL110	L.J. Medium Slant w/ Streptomycin (25 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL115	L.J. Medium Slant w/ Pyrazinamide of pH 5.5	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL115L	L.J. Medium Slant w/ Pyrazinamide pH 5.5	Low risk	20/12/2012
RPM- Ready Prepared Slants	SL116	Rapid UTI Diagnostic Slants	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL120L	L.J. Medium Slant pH 5.5	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL121	HiPyrazide glass tube w/ PYZ agar	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL121R	HiPyrazide glass tube w/ PYZ agar	Low risk	10/11/2020
RPM- L.J.Medium Slants	SL122	HiCatalase glass tubes w/ 5ml of L.J. medium	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL122R	HiCatalase glass tubes w/ 5ml of L.J. medium	Low risk	10/11/2020
RPM- L.J.Medium Slants	SL123	Tuberculosis first line plus kit (Modified)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL124	L.J. Medium slant (Tubes with Aluminium caps)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL125	L.J. Medium w/Isoniazid (1.0µg/ml) (Tube	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL125L	L.J.Medium Slant w/ Isoniazide (1mcg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL125M	L.J.Medium Slant w/ Isoniazid in Maccart	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL125X	L. J. Medium Slant w/ Isoniazide (1µg/ml)	Low risk	17/06/2021
RPM- L.J.Medium Slants	SL126	L.J. Medium w/Rifampicin (40.0µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL126L	L.J.Medium Slant w/ Rifampicin (40mcg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL126M	L.J.Medium Slant w/ Rifampicin in Maccar	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL126X	L. J. Medium Slant w/ Rifampicin (40.0 µg/ml)	Low risk	17/06/2021
RPM- L.J.Medium Slants	SL127	L.J. Medium w/Ethambutol (2.0µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL127L	L.J. Medium Slant w/Ethambutol (2µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL127X	L. J. Medium Slant w/ Ethambutol (2.0 µg/ml)	Low risk	17/06/2021
RPM- L.J.Medium Slants	SL128	L.J. Medium w/Streptomycin (10.0µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL128L	L.J.Medium w/Streptomycin - 10mcg / Ml	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL129	L.J. Medium w/Ethionamide (30.0µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL130	L.J. Medium w/Kanamycin (30.0µg/ml)	Low risk	20/12/2012

RPM- L.J.Medium Slants	SL130L	L.J. Medium Slant w/ Kanamycin (30µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL131	L.J. Medium w/Ofloxacin (2.0µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL132	L.J. Medium w/Capreomycin (30.0µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL133	L.J. Medium w/P-aminosalicylic acid (1.0	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL136L	Tuberculosis Second Line Kit, Modified	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL141	Modified L. J. Medium Plus Kit	Low risk	20/12/2012
RPM- Ready Prepared Slants	SL142	Cystine Tryptone Agar with 1% Sugars	Low risk	20/12/2012
RPM- Ready Prepared Slants	SL143	Tuberculosis First Line Kit, Modified	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL144	L.J Medium slant w/ Amikacin (1.0 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL147	L.J. Medium Slant w/Rifampicin (64µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL148	L.J. Medium Slant w/Ethambutol (6µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL149	L.J. Medium Slant w/Streptomycin (16µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL150	L.J Medium slant w/ Streptomycin (32 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL151	TB Five Antitubercular Kit w/o Control	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL152	Kit for Mycobiograve in Lowenstein Jensen	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL153	Tuberculosis First Line Plus Kit (Modified)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL154	L.J. Medium Plus Kit (total 9 slants)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL155L	L.J. Medium Slant w/ TCH	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL156	L.J.Medium Slant w/Rifampicin (128 µg /ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL157	L.J.Medium Slant w/Pyrazinamide pH 5.5	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL158	L.J.Medium Slant w/Ethambutol (8 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL159	L.J. Medium Slant w/Ethambutol (16 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL160L	Tuberculosis kit with antitubercular Age	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL161	L.J. Medium Slant w/ Ciprofloxacin (16 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL162	L.J. Medium Slant w/ Ciprofloxacin	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL163	L.J. Medium Slant w/Amikacin (20 µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL164	L.J. Medium Slant w/Amikacin (700 µg/ml)	Low risk	20/12/2012

RPM- L.J.Medium Slants	SL165L	L.J.Medium w/ Pyruvate (0.48%)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL166L	Tuberculosis kit with antitubercular Agent	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL167	L.J. Medium slants w/ Augmentin(20µg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL168	L.J.Medium Slant w/ Ofloxacin (40µg/ml)	Low risk	25/08/2016
RPM- L.J.Medium Slants	SL168L	L.J.Medium Slant w/ Ofloxacin (40µg/ml) (long tube)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL169	L.J.Medium Slant w/ Ethionamide (20µg/ml)	Low risk	25/08/2016
RPM- L.J.Medium Slants	SL169L	L.J.Medium Slant w/ Ethionamide (20µg/ml) (long tube)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL170L	L.J Medium Slant w/ Ethionamide (40µg/ml) (long tube)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL170X	L.J Medium Slant w/ Ethionamide (40 µg/ml)	Low risk	17/06/2021
RPM- L.J.Medium Slants	SL171L	L.J Medium Slant w/ p-Amino salicylic acid (1µg/ml) (long tube)	Low risk	20/12/2012
RPM- Ready Prepared Slants	SL172	Chocolate Agar Slant	Low risk	20/12/2012
RPM- Ready Prepared Slants	SL173	Nutrient Agar Slant	Low risk	20/12/2012
RPM- Ready Prepared Slants	SL174	B.C.G.-Dextrose Agar Butt (Synder Test Agar)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL175L	L.J.Medium Slant w/ Amikacin (30mcg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL175X	L. J. Medium Slant w/ Amikacin (30 mcg/ml)	Low risk	17/06/2021
RPM- L.J.Medium Slants	SL176L	L.J.Medium Slant w/ Ofloxacin (4mcg/ml)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL177	Tuberculosis First Line Kit, Modified (Total 5 slants)	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL179	L.J.Slopes for BCG Vaccines	Low risk	20/12/2012
RPM- Ready Prepared Slants	SL180	BHI Agar Slant w/5% Sheep Blood	Low risk	20/12/2012
RPM- Ready Prepared Slants	SL181	BHI Agar Slant w/10 % Sheep Blood,Chloramphenicol and Gentamicin	Low risk	20/12/2012
RPM- Ready Prepared Slants	SL182	BHI CC Agar Slant w/10 % Sheep Blood and Gentamicin	Low risk	20/12/2012
RPM- L.J.Medium Slants	SL187	L.J.Medium slants w/ LCN Supplement	Low risk	25/08/2016
RPM- L.J.Medium Slants	SL188L	L.J.Medium Slant w/ Levofloxacin (2 mg/ml)	Low risk	16/12/2017
RPM- L.J.Medium Slants	SL188X	L.J Medium Slant w/ Levofloxacin (2 µg/ml)	Low risk	17/06/2021
RPM- L.J.Medium Slants	SL189L	L.J.Medium Slant w/ Levofloxacin (2.5 mg/ml)	Low risk	16/12/2017
RPM- L.J.Medium Slants	SL189X	L.J Medium Slant w/ Moxifloxacin (2.5 µg/ml)	Low risk	17/06/2021
RPM- L.J.Medium Slants	SL190	L.J.Medium Slant w/ Rifampicin (20mcg/ml)	Low risk	04/07/2018

RPM- L.J.Medium Slants	SL191	L.J.Medium Slant w/ Amikacin (8mcg/ml)	Low risk	04/07/2018
RPM- L.J.Medium Slants	SL192	L.J.Medium Slant w/ Ofloxacin (5mcg/ml)	Low risk	04/07/2018
RPM- L.J.Medium Slants	SL193	L.J.Medium Slant w/ Levofloxacin (5 mcg/ml)	Low risk	04/07/2018
RPM- L.J.Medium Slants	SL194	L.J.Medium Slant w/ Ethionamide (5 mcg/ml)	Low risk	04/07/2018
RPM- L.J.Medium Slants	SL195	L.J.Medium Slant w/ Ethionamide (25 mcg/ml)	Low risk	04/07/2018
RPM- L.J.Medium Slants	SL196	L.J.Medium Slant w/ Prothionamide (5 mcg/ml)	Low risk	04/07/2018
RPM- L.J.Medium Slants	SL197	L.J.Medium Slant w/ Prothionamide (25 mcg/ml)	Low risk	04/07/2018
RPM- L.J.Medium Slants	SL198	L.J.Medium Slant w/ Linezolid (30 mcg/ml)	Low risk	04/07/2018
RPM- L.J.Medium Slants	SL199	L.J.Medium Slant w/ Clofazimine (1 mcg/ml)	Low risk	04/07/2018
RPM- L.J.Medium Slants	SL202	Middlebrook 7H10 Agar Slant	Low risk	30/10/2018
RPM- L.J.Medium Slants	SL204	L.J. Medium Slant w/ Prothionamide (40 mcg/ml)	Low risk	22/04/2019
RPM- L.J.Medium Slants	SL205	L.J. Medium Slant w/ Amikacin (40 mcg/ml)	Low risk	22/04/2019
RPM- L.J.Medium Slants	SL211	BHI Agar Slant	Low risk	30/10/2018
RPM- L.J.Medium Slants	SL1067L	Sabouraus Chloramphenicol Agar Slant	Low risk	16/12/2017
RPM- Ready Prepared Solid Medium	SM001	Nutrient Agar	Low risk	20/12/2012
RPM- Ready Prepared Solid Medium	SM001CCL	Nutrient Agar	Low risk	22/04/2019
RPM- Ready Prepared Solid Medium	SM001D	Nutrient Agar	Low risk	20/12/2012
RPM- Ready Prepared Solid Medium	SM016C	Brilliant Green Agar, Modified	Low risk	22/04/2019
RPM- Ready Prepared Solid Medium	SM027C	Bismuth Sulphite Agar	Low risk	22/04/2019
RPM- Ready Prepared Solid Medium	SM049C	Violet Red Bile Agar	Low risk	17/06/2021
RPM- Ready Prepared Solid Medium	SM049D	Violet Red Bile Agar	Low risk	22/04/2019
RPM- Ready Prepared Solid Medium	SM063	Sabouraud Dextrose Agar	Low risk	04/07/2018
RPM- Ready Prepared Solid Medium	SM063D	Sabouraud Dextrose Agar	Low risk	25/08/2016

RPM- Ready Prepared Solid Medium	SM078	Kligler Iron Agar	Low risk	25/08/2016
RPM- Ready Prepared Solid Medium	SM081	MacConkey Agar	Low risk	20/12/2012
RPM- Ready Prepared Solid Medium	SM081D	MacConkey Agar	Low risk	20/12/2012
RPM- Ready Prepared Solid Medium	SM082	MacConkey Agar	Low risk	20/12/2012
RPM- Ready Prepared Solid Medium	SM082D	MacConkey Agar	Low risk	20/12/2012
RPM- Ready Prepared Solid Medium	SM091	Plate Count Agar	Low risk	04/07/2018
RPM- Ready Prepared Solid Medium	SM091D	Plate Count Agar	Low risk	22/04/2019
RPM- Ready Prepared Solid Medium	SM091DCC	Plate Count Agar	Low risk	04/07/2018
RPM- Ready Prepared Solid Medium	SM091M	Plate Count Agar	Low risk	04/07/2018
RPM- Ready Prepared Solid Medium	SM103A	Modified Chocolate Agar Kit w/o Selective	Low risk	25/08/2016
RPM- Ready Prepared Solid Medium	SM103AR	Modified Chocolate Agar kit w/osupplement	Low risk	10/11/2020
RPM- Ready Prepared Solid Medium	SM103H	Modified Chocolate Agar kit	Low risk	25/08/2016
RPM- Ready Prepared Solid Medium	SM103HR	Modified Chocolate Agar kit w/supplement	Low risk	10/11/2020
RPM- Ready Prepared Solid Medium	SM1067	Sabouraud Chloramphenicol Agar Plate	Low risk	04/07/2018
RPM- Ready Prepared Solid Medium	SM1067C	Sabouraud Chloramphenicol Agar Plate	Low risk	04/07/2018
RPM- Ready Prepared Solid Medium	SM1067D	Sabouraud Chloramphenicol Agar	Low risk	17/06/2021
RPM- Ready Prepared Solid Medium	SM1067CCL	Sabouraud Chloramphenicol Agar Plate	Low risk	04/07/2018
RPM- Ready Prepared Solid Medium	SM1296D	HiCrome™ Salmonella Agar	Low risk	04/07/2018

RPM- Ready Prepared Solid Medium	SM1297A	HiCrome™ Candida Differential Agar	Low risk	25/08/2016
RPM- Ready Prepared Solid Medium	SM1353	HiCrome™ UTI Agar	Low risk	20/12/2012
RPM- Ready Prepared Solid Medium	SM1353CC	HiCrome™ UTI Agar	Low risk	04/07/2018
RPM- Ready Prepared Solid Medium	SM154D	Reinforced Clostridial Agar	Low risk	10/11/2020
RPM- Ready Prepared Solid Medium	SM173	Mueller Hinton Agar	Low risk	20/12/2012
RPM- Ready Prepared Solid Medium	SM173CCL	Mueller Hinton Agar	Low risk	22/04/2019
RPM- Ready Prepared Solid Medium	SM173D	Mueller Hinton Agar	Low risk	20/12/2012
RPM- Ready Prepared Solid Medium	SM211	BHI Agar	Low risk	20/12/2012
RPM- Ready Prepared Solid Medium	SM211D	BHI Agar	Low risk	20/12/2012
RPM- Ready Prepared Solid Medium	SM331C	Wilson Blair Agar	Low risk	22/04/2019
RPM- Ready Prepared Solid Medium	SM434	GC Agar	Low risk	25/08/2016
RPM- Ready Prepared Solid Medium	SM434R	Modified GC Agar Kit	Low risk	10/11/2020
RPM- Ready Prepared Solid Medium	SM434H	GC Agar,Modified	Low risk	25/08/2016
RPM- Ready Prepared Solid Medium	SM467	Hektoen Enteric Agar	Low risk	20/12/2012
RPM- Ready Prepared Solid Medium	SM467D	Hektoen Enteric Agar	Low risk	20/12/2012
RPM- Ready Prepared Solid Medium	SM792	C.L.E.D. Agar w/ Bromothymol Blue	Low risk	30/10/2018
RPM- Ready Prepared Solid Medium	SM837	Tryptose Sulphite Cycloserine(T.S.C) Agar	Low risk	17/06/2021
RPM- Ready Prepared Solid Medium	SM933D	Orange Serum Agar	Low risk	22/04/2019

RPM- Ready Prepared UTI Diagnostic Kits	K041	Rapid UTI ABST Kit	Low Risk	20/12/2012
RPM- Ready Prepared UTI Diagnostic Kits	K084A	Ecopathology Uro Kit-1	Low risk	20/12/2012
RPM- Ready Prepared UTI Diagnostic Kits	K084B	Ecopathology Uro Kit-1, Modified	Low risk	30/10/2018
RPM- Ready Prepared UTI Diagnostic Kits	K085A	Ecopathology Uro Kit-2	Low risk	20/12/2012
RPM- Ready Prepared UTI Diagnostic Kits	K089	Ecopathology Uro Kit-3	Low risk	20/12/2012
RPM- Ready Prepared UTI Diagnostic Kits	K090	Ecopathology Uro Kit-4	Low risk	20/12/2012
RPM- Biochemical Kits for Mycobacteria	K043	Nitrate Reduction Test Kit for Mycobacteria	Low risk	20/12/2012
RPM- Biochemical Kits for Mycobacteria	K044	Catalase Test Kit for Mycobacteria	Low risk	20/12/2012
RPM- Biochemical Kits for Mycobacteria	K044R	Catalase Test Kit for Mycobacteria	Low risk	10/11/2020
RPM- Biochemical Kits for Mycobacteria	K045	Pyrazinmidase Test Kit for Mycobacteria	Low risk	20/12/2012
RPM- Biochemical Kits for Mycobacteria	K045R	Pyrazinmidase Test Kit for Mycobacteria (Low risk	10/11/2020
RPM- Biochemical Kits for Mycobacteria	K046	Thiopene Carboxylic Hydrazide Test Kit for Mycobacteria	Low risk	20/12/2012
RPM- Biochemical Kits for Mycobacteria	K047	Niacin Detection Kit w/ syringe	Low risk	20/12/2012
RPM- Biochemical Kits for Mycobacteria	K048	Niacin Detection Kit Modified w/o syringe	Low risk	20/12/2012
RPM- Biochemical Kits for Mycobacteria	K050	Kit for Selective Isolation of M.tuberculosis	Low risk	20/12/2012
RPM-MRSA Kits	K058S	MRSA Alert kit (w/swabs)	Low risk	25/08/2016
RPM-MRSA Kits	K058SR	MeReSa Agar Base,MRSA Alert Kit (w/swabs)	Low risk	25/08/2016
RPM-MRSA Kits	K086R	Enterococcus Presumptive Broth (VRE Alert)	Low risk	25/08/2016
RPM- Ready Prepared Diagnostic Kits	K144	Mucormycosis Detection Kit	Low risk	10/06/2021
RPM- Biochemical Identification Kits	KB001	HiIMViC™ Biochemical Test Kit	Low risk	20/12/2012
RPM- Biochemical Identification Kits	KB001R	HiIMViC Biochemical Test Kit	Low risk	25/08/2016

RPM- Biochemical Identification Kits	KB002	HiAssorted™ Biochemical Test Kit	Low risk	20/12/2012
RPM- Biochemical Identification Kits	KB002R	HiAssorted Biochemical Test Kit	Low risk	25/08/2016
RPM- Biochemical Identification Kits	KB003	Hi25™ Enterobacteriaceae Identification Kit	Low risk	20/12/2012
RPM- Biochemical Identification Kits	KB003R	Hi25 Enterobacteriaceae Identification Kit	Low risk	25/08/2016
RPM- Biochemical Identification Kits	KB004	HiStaph™ Identification Kit	Low risk	20/12/2012
RPM- Biochemical Identification Kits	KB004R	HiStaph Identification Kit	Low risk	25/08/2016
RPM- Biochemical Identification Kits	KB005A	HiStrep™ Identification Kit	Low risk	20/12/2012
RPM- Biochemical Identification Kits	KB005AR	HiStrep Identification Kit	Low risk	25/08/2016
RPM- Biochemical Identification Kits	KB006	HiCandida™ Identification Kit	Low risk	20/12/2012
RPM- Biochemical Identification Kits	KB006R	HiCandida Identification Kit	Low risk	25/08/2016
RPM- Biochemical Identification Kits	KB007	HiVibrio™ Identification Kit	Low risk	20/12/2012
RPM- Biochemical Identification Kits	KB007R	HiVibrio Identification Kit	Low risk	25/08/2016
RPM- Biochemical Identification Kits	KB008	HiNeisseria™ Identification Kit	Low risk	20/12/2012
RPM- Biochemical Identification Kits	KB008R	HiNeisseria Identification Kit	Low risk	25/08/2016
RPM- Biochemical Identification Kits	KB009	HiCarbo™ Kit	Low risk	20/12/2012
RPM- Biochemical Identification Kits	KB009R	HiCarbo Kit	Low risk	25/08/2016
RPM- Biochemical Identification Kits	KB009A	HiCarbo™ Kit- Part A	Low risk	20/12/2012
RPM- Biochemical Identification Kits	KB009AR	HiCarbo Kit- Part A	Low risk	25/08/2016
RPM- Biochemical Identification Kits	KB009B1	HiCarbo™ Kit- Part B	Low risk	20/12/2012
RPM- Biochemical Identification Kits	KB009C	HiCarbo™ Kit- Part C	Low risk	20/12/2012
RPM- Biochemical Identification Kits	KB010	HiE. coli™ Identification Kit	Low risk	20/12/2012
RPM- Biochemical Identification Kits	KB010R	HiE.coli™ Identification Kit	Low risk	25/08/2016
RPM- Biochemical Identification Kits	KB011	HiSalmonella™ Identification Kit	Low risk	20/12/2012
RPM- Biochemical Identification Kits	KB011R	HiSalmonella Identification Kit	Low risk	25/08/2016
RPM- Biochemical Identification Kits	KB012A	HiListeria™ Identification Kit	Low risk	20/12/2012
RPM- Biochemical Identification Kits	KB012AR	HiListeria Identification Kit	Low risk	25/08/2016
RPM- Biochemical Identification Kits	KB013	HiBacillus™ Identification Kit	Low risk	20/12/2012

RPM- Biochemical Identification Kits	KB013R	HiCarbo Kit (HiBacillus Identification Kit)	Low risk	25/08/2016
RPM- Biochemical Identification Kits	KB014	HiAcinetobacter™ Identification Kit	Low risk	20/12/2012
RPM- Biochemical Identification Kits	KB014R	HiCarbo Kit (HiAcinetobacter Identification Kit)	Low risk	25/08/2016
RPM- Biochemical Identification Kits	KB015	HiCorynebacteria Identification Kit	Low risk	12/08/2015
RPM- Biochemical Identification Kits	KB016	Hi24™ Enterobacteriaceae Identification Kit,Modified	Low risk	12/08/2015
RPM- Biochemical Identification Kits	KB019	Hi24™ Nonfermenters Identification Kit	Low risk	28/04/2017
RPM- Biochemical Identification Kits	KB020	HiLacto Identification Kit	Low risk	28/04/2017
RPM- Biochemical Identification Kits	KB021	HiBifido Identification Kit	Low risk	28/04/2017
RPM- Biochemical Identification Kits	KBM001	HiMotility™ Biochemical Kit for E.coli	Low risk	20/12/2012
RPM- Biochemical Identification Kits	KBM001R	HiMotility Biochemical Kit for E.coli	Low risk	25/08/2016
RPM- Biochemical Identification Kits	KBM002	HiMotility™ Biochemical Kit for Salmonella	Low risk	20/12/2012
RPM- Biochemical Identification Kits	KBM002R	HiMotility™ Biochemical Kit for Salmonella	Low risk	25/08/2016
RPM- Biochemical Identification Kits	KBM003A	HiMotility™ Biochemical Kit for Listeria	Low risk	20/12/2012
RPM- Biochemical Identification Kits	KBM003AR	HiMotility™ Biochemical Kit for Listeria	Low risk	25/08/2016

Product group	Type/ Model / Ref number	Device Name	Risk Class	Date of CE compliance
Epidemeology Screening Kit				
ESK- Hi Aureus Confirmation Kits	K053AD	Hiareus Coagulase Confirmation Kit (w/o swabs)	Low risk	07/02/2012
ESK- Hi Aureus Confirmation Kits	K053ADS	Hiareus Coagulase Confirmation Kit (w/ swabs)	Low risk	07/02/2012

Product group	Type/ Model / Ref number	Device Name	Risk Class	Date of CE compliance
Bacteriological Differentiation Aids				
BDA- HiDtect Rapid Identification Discs	DT001	HiDtect™ UTI Identification Disc	Low risk	20/12/2012
BDA- HiDtect Rapid Identification Discs	DT003	HiDtect™ Pseudomonas Identification Disc	Low risk	20/12/2012
BDA- HiDtect Rapid Identification Discs	DT015	HiDtect™ Universal Enviro Identification Disc	Low risk	20/12/2012
BDA- Readymade Indicators in Liquid	I001	Andrade's Indicator	Low risk	20/12/2012
BDA- Readymade Indicators in Liquid	I002	Bromocresol Green Indicator	Low risk	20/12/2012
BDA- Readymade Indicators in Liquid	I003	Bromocresol Purple Indicator	Low risk	20/12/2012
BDA- Readymade Indicators in Liquid	I004	Bromophenol Blue Indicator	Low risk	20/12/2012
BDA- Readymade Indicators in Liquid	I005	Bromothymol Blue Indicator	Low risk	20/12/2012
BDA- Readymade Indicators in Liquid	I006	Methyl Orange Indicator	Low risk	20/12/2012
BDA- Readymade Indicators in Liquid	I007	Methyl Red Indicator	Low risk	20/12/2012
BDA- Readymade Indicators in Liquid	I008	Neutral Red Indicator	Low risk	20/12/2012
BDA- Readymade Indicators in Liquid	I009	Phenolphthalein, 0.1% w/v	Low risk	20/12/2012
BDA- Readymade Indicators in Liquid	I010	Phenol Red Indicator	Low risk	20/12/2012
BDA- Readymade Indicators in Liquid	I011	Thymol Blue Indicator	Low risk	20/12/2012
BDA- Readymade Indicators in Liquid	I012	Thymolphthalein Indicator	Low risk	20/12/2012
BDA- Readymade Indicators in Liquid	I013	Universal Indicator	Low risk	20/12/2012
BDA- Readymade Indicators in Liquid	I014	Mixed Indicator Solution (25X)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	K001	Gram Stains - Kit (contains S012, S032, S013 and S027 or S038)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	K001CCL	Gram Stains - Kit (contains S012, S032, S013 and S027 or S038)	Low risk	04/07/2018
BDA- Readymade Stains in Liquid	K001D	Gram Staining Kit	Low risk	04/07/2018
BDA- Readymade Stains in Liquid	K001L	Gram Stains - Kit (contains S012, S032, S013 and S027 or S038)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	K001M	Gram Stains - Kit	Low risk	22/04/2019
BDA- Readymade Stains in Liquid	K002	Albert's Metachromatic Stains - Kit	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	K002L	Albert's Metachromatic Stains - Kit	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	K003	Neisser's Metachromatic Stains - Kit (contains S013, S023 and S037)	Low risk	20/12/2012

BDA- Readymade Stains in Liquid	K003L	Neisser's Metachromatic Stains - Kit (contains S013, S023 and S037)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	K004	Capsule Stains - Kit (contains S021, S025 and S047)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	K004L	Capsule Stains - Kit (contains S021, S025 and S047)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	K005	ZN Acid Fast Stains - Kit (contains S033,S005 and S022)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	K005CCL	ZN Acid Fast Stains - Kit (contains S033,S005 and S022)	Low risk	04/07/2018
BDA- Readymade Stains in Liquid	K005D	ZN Acid Fast Stains - Kit	Low risk	04/07/2018
BDA- Readymade Stains in Liquid	K005L	ZN Acid Fast Stains - Kit (contains S033, S005 & S022)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	K005M	ZN Acid Fast Stains - Kit (contains S033, S005 & S022)	Low risk	22/04/2019
BDA- Readymade Stains in Liquid	K006	Schaeffer & Fulton's Spore Stains - Kit (contains S028 and S029)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	K006L	Schaeffer & Fulton's Spore Stains - Kit (contains S028 and S029)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	K011	Malarial Parasite - Kit (contains S008 and S009)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	K011L	Malarial Parasite - Kit (contains S008 and S009)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	K021	Fluorescent Stains - Kit for Mycobacteria (contains S042, S043 and S044)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	K021L	Fluorescent Stains - Kit for Mycobacteria (contains S042, S043 and S044)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	K021R	Fluorescent Stains Kit for Mycobacteria (contains S054,S055,S056)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	K021Y	Fluorescent Stains Kit for Mycobacteria (contains S042Y,S043Y,S044Y)	Low risk	04/07/2018
BDA- Readymade Stains in Liquid	K049	Malarial Parasite - Kit (contains S008 and S009)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	K061	HiFluo-Phenol Free Stain - kit for Mycobacteria [Kit contains 200ml each of Auramine – Rhodamine solution (Phenol free)-S082, Decolourizer-S099 (2 x200), Potassium Permanganate Solution-S083]	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	K062	HiCold Stain TB - Kit for Mycobacteria [Kit contains 500ml each of Carbol Fuchsin Solution-S080, Decolourizer-S099, Counter Stain (Loeffler's Methylene Blue)-S081]	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	K062S	HiCold Stain TB - Kit for Mycobacteria [Kit contains 100ml each of Carbol Fuchsin Solution-S080, Decolourizer-S099, Counter Stain (Loeffler's Methylene Blue) S081]	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	K063	Modified Neisser's Metachromatic Stains - Kit (1 minute staining)	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R001	Barium Chloride Solution, 10% w/v	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R002	Benedict's Qualitative Reagent	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R003	Benedict's Quantitative Reagent	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R004	C.S.F. Diluting Fluid	Low risk	20/12/2012

BDA - Readymade Reagents in Liquid	R005	Ehrlich's Aldehyde Reagent	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R006	Folin & Wu's Alkaline Copper Solution	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R007	Folin & Wu's Phosphate, Molybdate Solution	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R008	Kovacs' Indole Reagent	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R009	a-Naphthylamine solution	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R010	Nessler's Reagent	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R011	Potassium Chromate, 5% w/v	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R012	Potassium Oxalate, 5% w/v	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R013	R.B.C. Diluting Fluid (Hayemis)	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R014	Sodium Citrate, 3.8% w/v	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R015	Sulphanilic acid, 0.8%	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R016	W.B.C. Diluting Fluid	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R017	Nessler's Reagent	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R018	Fouchet's Reagent	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R019	E.D.T.A. (di-sodium) 5%	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R020	Sulphosalicylic Acid 3%	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R021	Topfer Reagent	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R022	o-Toluidine reagent	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R023	R.B.C. Diluting Fluid (Grower's)	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R024	o-Toluidine Reagent	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R026	Gordon-McLeod Reagent (Oxidase reagent)	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R027	Gaby-Hadley Reagent A	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R028	Gaby-Hadley Reagent B	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R029	Barritt Reagent A (for VP test)	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R030	Barritt Reagent B (for VP test)	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R031	O'Meara Reagent	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R035	DMACA Reagent	Low risk	20/12/2012

BDA - Readymade Reagents in Liquid	R036	TDA Reagent	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R037	Fehling Solution No. 1	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R038	Fehling Solution No. 2	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R043	PYR Reagent	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R044	Iodine Solution	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R075	10X RBC Lysis Buffer Solution	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R083	Thrombocount reagent	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R084	HiDecal (mild decalcifying solution)	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R085	HiDecal (strong decalcifying solution)	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R092	McFarland Standard Tube	Low risk	20/12/2012
BDA - Readymade Reagents in Liquid	R092A	Mcfarland standard 0.5	Low risk	22/04/2019
BDA - Readymade Reagents in Liquid	R092B	Mcfarland standard 1	Low risk	22/04/2019
BDA - Readymade Reagents in Liquid	R092C	Mcfarland standard 2	Low risk	22/04/2019
BDA - Readymade Reagents in Liquid	R092D	Mcfarland standard 3	Low risk	22/04/2019
BDA - Readymade Reagents in Liquid	R092E	Mcfarland standard 4	Low risk	22/04/2019
BDA - Readymade Reagents in Liquid	R092R	Test Tubes (McFarland Standard Tube)	Low risk	25/08/2016
BDA - Readymade Reagents in Liquid	R092S	McFarland Standard Set (0.5,1,2)	Low risk	04/07/2018
BDA - Readymade Reagents in Liquid	R097	Millons reagent	Low risk	28/04/2017
BDA- Readymade Stains in Liquid	S001	Albert's Stain A	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S002	Albert's Stain B	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S003	Borax Carmine (Grenacher's), Alcoholic Stain	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S004	Borax Carmine (Grenacher's), Aqueous Stain	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S005	Carbol Fuchsin (ZN,Strong)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S005D	Carbol Fuchsin (ZN,Strong)	Low risk	04/07/2018
BDA- Readymade Stains in Liquid	S005M	Carbol Fuchsin (ZN,Strong)	Low risk	22/04/2019
BDA- Readymade Stains in Liquid	S006	Carbol Fuchsin (ZN, Dilute)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S007	Eosin, 2% w/v	Low risk	20/12/2012

BDA- Readymade Stains in Liquid	S008	Field's Stain A	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S009	Field's Stain B	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S010	Gentian Violet	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S011	Giemsa's Stain	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S012	Gram's Crystal Violet	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S012D	Gram's Crystal Violet	Low risk	04/07/2018
BDA- Readymade Stains in Liquid	S012M	Gram's Crystal Violet	Low risk	22/04/2019
BDA- Readymade Stains in Liquid	S013	Gram's Iodine	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S013D	Gram's Iodine	Low risk	04/07/2018
BDA- Readymade Stains in Liquid	S013M	Gram's Iodine	Low risk	22/04/2019
BDA- Readymade Stains in Liquid	S014	Haematoxylin (Delafield's)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S015	Lactophenol	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S016	Lactophenol Cotton Blue	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S017	Lactophenol Picric Acid	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S018	Leishman's Stain (Twin Pack)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S018S	Leishman's Stain Solution	Low risk	25/11/2017
BDA- Readymade Stains in Liquid	S019	Lugol's Iodine	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S020	Malachite Green, 1% w/v	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S021	Methylene Blue (Aqueous)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S022	Methylene Blue (Loeffler's)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S022D	Methylene Blue (Loeffler's)	Low risk	04/07/2018
BDA- Readymade Stains in Liquid	S022M	Methylene Blue (Loeffler's)	Low risk	22/04/2019
BDA- Readymade Stains in Liquid	S023	Neisser's Methylene Blue	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S024	Newman's Stain, Modified	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S025	Nigrosin Stain, 10% w/v	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S026	Picric Acid (Saturated, Aqueous)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S027	Safranin, 0.5% w/v	Low risk	20/12/2012

BDA- Readymade Stains in Liquid	S027D	Safranin, 0.5% w/v	Low risk	04/07/2018
BDA- Readymade Stains in Liquid	S027M	Safranin, 0.5% w/v	Low risk	22/04/2019
BDA- Readymade Stains in Liquid	S028	Schaeffer & Fulton's Spore Stain A	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S029	Schaeffer & Fulton's Spore Stain B	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S030	Wright's Stain	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S031	Mayer's Mucicarmine Stain	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S032	Gram's Decolourizer	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S032D	Gram's Decolourizer	Low risk	04/07/2018
BDA- Readymade Stains in Liquid	S032M	Gram's Decolourizer	Low risk	22/04/2019
BDA- Readymade Stains in Liquid	S033	Acid Fast Decolourizer	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S033D	Acid Fast Decolourizer	Low risk	04/07/2018
BDA- Readymade Stains in Liquid	S033M	Acid Fast Decolourizer	Low risk	22/04/2019
BDA- Readymade Stains in Liquid	S034	Haematoxylin (Harris)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S035	Papanicolaou-OG-6	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S036	Papanicolaou-EA-36	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S037	Neutral Red Solution	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S038	Basic Fuchsin 0.1% w/v	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S038D	Basic Fuchsin 0.1% w/v	Low risk	04/07/2018
BDA- Readymade Stains in Liquid	S038M	Basic Fuchsin 0.1% w/v	Low risk	22/04/2019
BDA- Readymade Stains in Liquid	S039	May-Grunwald's Stain	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S041	FA Rhodamine Counterstain	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S042	Phenolic auramine	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S042Y	Phenolic auramine O	Low risk	08/12/2017
BDA- Readymade Stains in Liquid	S043	Mycobacteria decolourizer	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S043Y	Mycobacteria decolourizer	Low risk	16/12/2017
BDA- Readymade Stains in Liquid	S044	Potassium permanganate	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S044Y	Potassium permanganate	Low risk	08/12/2017

BDA- Readymade Stains in Liquid	S047	M'Fadyean Stain (Polychrome Methylene Blue)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S054	Fluorochrome Solution	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S055	Decolourising Solution	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S056	Background Solution	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S057	Grams Iodine, Stabilized	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S058	Haematoxylin (Mayer)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S059	Haematoxylin (Ehrlich)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S062	Fixing solution, for fixing Haematological samples	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S066	Brilliant Cresyl Blue Solution	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S067	Congo red (1% aqueous)Solution	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S068	Papanicolaou-EA-50	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S070	Schiff's fuchsin-sulphite reagent	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S073	Periodic Acid Solution (PAS)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S074	Schiff's Reagent	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S076	Haematoxylin (Gill No.3)	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S102	Fixative, for fixing cytological or histological samples	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S109	Fixative (Buffered Formalin fixative) for fixing cytological or histological samples	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S118	Fixative, for rapid fixing of haematological samples	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S119	Fixative (BFA), for Rapid fixing of haematological samples	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S125	Romanowsky-Giemsa (RG) stain	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S126	Shorr's Stain solution	Low risk	20/12/2012
BDA- Readymade Stains in Liquid	S127	Gabbett Counterstaining Solution	Low risk	16/12/2017
BDA- Readymade Stains in Liquid	S128	HiGrams Stain Crystal Violet	Low risk	16/12/2017
BDA- Readymade Stains in Liquid	S129	HiGrams Iodine	Low risk	16/12/2017
BDA- Readymade Stains in Liquid	S130	HiGrams Decolouriser	Low risk	16/12/2017
BDA- Readymade Stains in Liquid	S131	HiGrams Counter Stain	Low risk	16/12/2017
BDA- Readymade Stains in Liquid	S132	HiCarbol Fuchsin	Low risk	16/12/2017

BDA- Readymade Stains in Liquid	S133	HiAcid Fast Decolouriser	Low risk	16/12/2017
BDA- Readymade Stains in Liquid	S134	HiAcid Fast Counter Stain	Low risk	16/12/2017
BDA- Readymade Stains in Liquid	S135	Solution for Leishman's Stain L (Twin Pack)	Low risk	16/12/2017
BDA- Readymade Stains in Liquid	S136	Solution for Leishman's Stain R (Twin Pack)	Low risk	16/12/2017
BDA- Readymade Stains in Liquid	S137	Solution for Leishman's Stain HP (Twin Pack)	Low risk	16/12/2017
BDA- Readymade Stains in Liquid	S138	Gentian Violet 1 % Solution	Low risk	22/04/2019
BDA- Differentiation Discs	DD015	Bacitracin	Low risk	20/12/2012
BDA- Differentiation Discs	DD024	Bile Esculin	Low risk	20/12/2012
BDA- Differentiation Discs	DD040	DMACA Indole	Low risk	20/12/2012
BDA- Differentiation Discs	DD035	Hippurate hydrolysis	Low risk	20/12/2012
BDA- Differentiation Strips	DD034	Lead Acetate Paper strips	Low risk	20/12/2012
BDA- Differentiation Discs	DD041	Nitrate Discs	Low risk	20/12/2012
BDA- Differentiation Discs	DD042	Nitrate Reagent Discs	Low risk	20/12/2012
BDA- Differentiation Discs	DD008	ONPG	Low risk	20/12/2012
BDA- Differentiation Discs	DD009	Optochin	Low risk	20/12/2012
BDA- Differentiation Discs	DD009R	Optochin (5mcg)	Low risk	25/08/2016
BDA- Differentiation Discs	DD018	Oxidase	Low risk	20/12/2012
BDA- Differentiation Discs	DD020	X factor	Low risk	20/12/2012
BDA- Differentiation Discs	DD022	X+V Factor	Low risk	20/12/2012
BDA- Differentiation Discs	DD021	V Factor	Low risk	20/12/2012
BDA- Differentiation Discs	DD047	Vibrio 0129 Differential Disc (10 mcg)	Low risk	20/12/2012
BDA- Differentiation Discs	DD048	Vibrio 0129 Differential Disc (150 mcg)	Low risk	20/12/2012
BDA- Differentiation Discs	DD055	Bacitracin B	Low risk	25/08/2016
BDA- Differentiation Discs	DD056	Sodium Biselenite Disc	Low risk	04/07/2018
BDA- Differentiation Discs	DB001	Sodium Biselenite Bud	Low risk	04/07/2018

Product group	Type/ Model / Ref number	Device Name	Risk Class	Date of CE compliance
Antimicrobial Susceptibility Systems				
ASS- Sensitivity Discs (Multi Discs)	DE001	Dodeca Universal-I	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE002	Dodeca G-I-Plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE003	Dodeca G-I-Minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE004	Dodeca UTI-I	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE005	Dodeca UTI-II	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE006	Dodeca UTI-III	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE007	Dodeca Universal-II	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE008	Dodeca Universal-III	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE009	Dodeca G-II-Plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE010	Dodeca G-II-Minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE011	Dodeca UTI-IV	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE012	Dodeca Universal-IV	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE013	Dodeca Universal-V	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE014	Dodeca Universal-VI	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE015	Dodeca Universal-VII	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE016	Dodeca Universal III	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE017	Dodeca Universal-IX	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE018	Dodeca G-III-Plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE019	Dodeca G-III-Minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE020	Dodeca Pseudo-I	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE021	Dodeca UTI-V	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE022	Dodeca Universal X	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE023	Dodeca G-IV Plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE024	Dodeca G-IV minus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE025	Dodeca UTI-VI	Low risk	20/12/2012

ASS- Sensitivity Discs (Multi Discs)	DE026	Dodeca Universal -XI	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE027	Dodeca Universal -XII	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE028	Dodeca Universal -XIII	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE029	Dodeca G-V minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE030	Dodeca UTI-VII	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE031	Dodeca G-VI minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE032	Dodeca G-V Plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE033	Dodeca G-VII Minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE034	Dodeca UTI-VIII	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE035	Dodeca Universal XIV	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE036	Dodeca G-VI Plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE037	Dodeca G-VIII Minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE038	Dodeca G-VII Plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE039	Dodeca G-IX Minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE040	Dodeca UTI-IX	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE041	Dodeca Pseudo-II	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE042	Dodeca Universal XV	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE043	Dodeca G-X Minus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE044	Dodeca - G-VIII Plus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE045	Dodeca G-XI Minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE046	Dodeca G-XII Minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE047	Dodeca G-IX Plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE048	Dodeca Staphylococci - 1	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE049	Dodeca Staphylococci - 2	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE050	Dodeca Enterococcus -1	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE051	Dodeca Pseudomonas -1	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE052	Dodeca Pseudomonas 2	Low risk	25/08/2016

ASS- Sensitivity Discs (Multi Discs)	DE053	Dodeca Enterobacteriaceae - 1	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE054	Dodeca Enterobacteriaceae - 2	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	DE700	Dodeca Staphylococci - 1	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE701	Dodeca Staphylococci - 2	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE702	Dodeca Enterococcus - 1	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE703	Dodeca Pseudomonas - 1	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE704	Dodeca Pseudomonas - 2	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE705	Dodeca Enterobacteriaceae - 1	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE706	Dodeca Enterobacteriaceae - 2	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE707	Dodeca Universal - 16	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE708	Dodeca UTI - 10	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE709	Dodeca G-Minus 13	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE710	Dodeca G-Plus 10	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE711	Dodeca G minus XIV	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE712	Dodeca G minus XV	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE713	Dodeca G minus 16	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE714	Dodeca G minus 17	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE715	Dodeca G minus 18	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE716	Dodeca G plus 11	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE717	Dodeca G plus 12	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE718	Dodeca G minus 19	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE719	Dodeca UTI 10	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE720	Dodeca UTI 11	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE721	Dodeca Universal 16	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE722	Dodeca Universal 17	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE723	Dodeca G Plus 13	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE724	Dodeca UTI-12	Low risk	25/08/2016

ASS- Sensitivity Discs (Multi Discs)	DE725	Dodeca Universal-18	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE726	Dodeca UTI - 13	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE727	Dodeca G-minus 20	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE728	Dodeca UTI 14	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE729	Dodeca G-Plus 14	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE730	Dodeca G-Minus 21	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE731	Dodeca G-Minus 22	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE732	Dodeca Universal 19	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE733	Dodeca Universal 20	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE734	Dodeca Universal 21	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE735	Dodeca Universal 22	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE736	Dodeca G-Plus 15	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE737	Dodeca G-Minus 23	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE738	Dodeca G-Minus 24	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE739	Dodeca UTI 13	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE740	Dodeca G-Plus 16	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE741	Dodeca G-Minus 25	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE742	Dodeca Pseudomonas -3	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	DE743	Dodeca G-Minus 26	Low risk	04/07/2018
ASS- Sensitivity Discs (Multi Discs)	DE744	Dodeca UTI 15	Low risk	04/07/2018
ASS- Sensitivity Discs (Multi Discs)	DE745	Dodeca Pseudomonas -4	Low risk	04/07/2018
ASS- Sensitivity Discs (Multi Discs)	DE746	Dodeca G-Plus 17	Low risk	04/07/2018
ASS- Sensitivity Discs (Multi Discs)	DE747	Dodeca G-Minus 27	Low risk	04/07/2018
ASS- Sensitivity Discs (Multi Discs)	DE748	Dodeca UTI 16	Low risk	04/07/2018
ASS- Sensitivity Discs (Multi Discs)	DE749	Dodeca G-Plus 18	Low risk	10/11/2020
ASS- Sensitivity Discs (Multi Discs)	DE750	Dodeca G-Plus 19	Low risk	10/11/2020
ASS- Sensitivity Discs (Multi Discs)	DE751	Dodeca G-Minus 28	Low risk	10/11/2020

ASS- Sensitivity Discs (Multi Discs)	DE752	Dodeca G-Minus 29	Low risk	10/11/2020
ASS- Sensitivity Discs (Multi Discs)	DE753	Dodeca G-Plus 20	Low risk	10/11/2020
ASS- Sensitivity Discs (Multi Discs)	DE754	Dodeca G-Minus 30	Low risk	10/11/2020
ASS- Sensitivity Discs (Multi Discs)	DE755	Dodeca Pseudomonas -5	Low risk	10/11/2020
ASS- Sensitivity Discs (Multi Discs)	DE756	Dodeca G-Minus 31	Low risk	10/11/2020
ASS- Sensitivity Discs (Multi Discs)	DE757	Dodeca G-Plus 21	Low risk	10/11/2020
ASS- Ezy MIC Strips	EM001	Amikacin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM002	Amoxycillin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM003	Amoxyclav (2:1)	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM004	Azithromycin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM006	Aztreonam	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM008	Cefazolin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM009	Cefdinir	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM011	Cefpirome	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM012	Ceftazidime	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM013	Ceftriaxone	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM016	Chloramphenicol	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM017	Ciprofloxacin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM018	Clarithromycin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM019	Clindamycin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM020	Colistin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM020S	Colistin	Low risk	04/07/2018
ASS- Ezy MIC Strips	EM021	Co-Trimoxazole (1:19)	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM021S	Co-Trimoxazole (1:19)	Low risk	04/07/2018
ASS- Ezy MIC Strips	EM022	Erythromycin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM023	Fusidic Acid	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM024	Gatifloxacin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM025	Gentamicin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM026	Kanamycin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM027	Levofloxacin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM029	Linezolid	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM032	Minocycline	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM033	Moxifloxacin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM035	Nalidixic acid	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM037	Nitrofurantoin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM038	Norfloxacin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM039	Ofloxacin	Low risk	20/12/2012

ASS- Ezy MIC Strips	EM041	Piperacillin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM042	Piperacillin/Tazobactam	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM043	Polymixin B	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM044	Pristinomyacin (Quinupristin/Dalfopristin)	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM045	Rifampicin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM046	Roxithromycin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM047	Sparfloxacin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM048	Streptomycin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM055	Teicoplanin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM055S	Teicoplanin	Low risk	04/07/2018
ASS- Ezy MIC Strips	EM056	Tetracycline	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM057	Ticarcillin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM058	Tobramycin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM059	Trimethoprim	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM060	Vancomycin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM060S	Vancomycin	Low risk	04/07/2018
ASS- Ezy MIC Strips	EM061	Gentamicin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM062	Penicillin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM063	Oxacillin - Vancomycin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM064	Cefotaxime	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM065	Oxacillin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM066	Ceftriaxone	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM066S	Ceftriaxone	Low risk	04/07/2018
ASS- Ezy MIC Strips	EM068	Ampicillin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM070	Cefepime	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM071	Amphotericin-B	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM072	Fluconazole	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM073	Itraconazole	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM074	Ketoconazole	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM076	Gemifloxacin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM077	Vancomycin -Cefoxitin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM078	Imipenem w&w/o EDTA	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM079A	Triple ESBL detection Strip	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM080	Meropenem	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM081A	ESBL & AmpC Detection Strip	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM082	Ciprofloxacin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM083	Co-Trimoxazole (1:19)	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM084	Penicillin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM085	Ertapenem	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM086	Voriconazole	Low risk	20/12/2012

ASS- Ezy MIC Strips	EM087	Mupirocin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM088	Daptomycin (Supplemented with Calcium ions)	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM089	Tigecycline	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM090	Doripenem	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM091	Faropenem	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM092	Meropenem with & without EDTA	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM093	Cefepime/Tazobactam (2:1)	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM094	Cefoperazone/Sulbactam (2:1)	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM095	Netilmicin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM097	Ceftriaxone/Sulbactam (2:1)	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM098	Ceftazidime / Ceftazidime+ Clavulanic acid	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM099	Cefotaxime / Cefotaxime + Clavulanic acid	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM100	Cefotaxime	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM101	Cefoxitin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM102	Cefuroxime	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM103	Doxycycline	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM104	Imipenem	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM105	Cefotetan	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM106	Cephalothin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM107	Cefaclor	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM108	Fosfomicin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM109	Ampicillin/Sulbactam	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM110	Cefixime	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM111	Vancomycin - Teicoplanin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM112	Cefoperazone	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM113	Cefonicid	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM114	Cefmetazole	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM115	Enrofloxacin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM116	Cefepime / cefepime + Clavulanic acid	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM117	Ceftriaxone / Ceftriaxone + Clavulanic acid	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM118	Flucytosine	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM119	Caspofungin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM120	Posaconazole	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM121	Micafungin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM122	Anidulafungin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM123	Ceftizoxime	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM124	Mecillinam	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM125	Ticarcillin/Clavulanic Acid	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM126	Bacitracin	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM127	Cefotetan / Cefotetan + Cloxacillin	Low risk	20/12/2012

ASS- Ezy MIC Strips	EM128	Metronidazole	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM129	Cefpodoxime	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM130	Cefprozil	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM131	Sulbactam	Low risk	20/12/2012
ASS- Ezy MIC Strips	EM132	Improved ESBL Detection Ezy MIC Strip (Mix+/Mix)	Low risk	25/08/2016
ASS- Ezy MIC Strips	EM133	Improved AmpC Detection Ezy MIC Strip (Mix+/Mix)	Low risk	25/08/2016
ASS- Ezy MIC Strips	EM134	MBL Plus ESBL Detection Ezy MIC Strip (ESBL+/ESBL)	Low risk	25/08/2016
ASS- Ezy MIC Strips	EM135	MBL Plus AmpC Detection Ezy MIC Strip (AmpC+/Amp)	Low risk	25/08/2016
ASS- Ezy MIC Strips	EM136	ESBL-AmpC Coexistence Detection Ezy MIC Kit	Low risk	25/08/2016
ASS- Ezy MIC Strips	EM137	MBL-ESBL-AmpC Co-existence Detection Ezy MIC Kit	Low risk	25/08/2016
ASS- Ezy MIC Strips	EM138	Cefpodoxime/Clavulanic Acid Ezy MIC Strip	Low risk	25/08/2016
ASS- Ezy MIC Strips	EM139	Amoxyclav Ezy MIC Strip (AUG) (0.016-256 mcg/ml)	Low risk	25/08/2016
ASS- Ezy MIC Strips	EM140	Ampicillin/Sulbactam Ezy MIC Strip (SAM) (4 mcg/ml)	Low risk	25/08/2016
ASS- Ezy MIC Strips	EM141	Ertapenem/Ertapenem + Boronic acid Ezy MIC Strip (ETP+/ETP)	Low risk	25/08/2016
ASS- Ezy MIC Strips	EM142	Terbinafine Ezy MIC Strip(TRB) (0.002-32 mcg/ml)	Low risk	25/08/2016
ASS- Ezy MIC Strips	EM143	Griseofulvin Ezy MIC Strip (GRI) (0.002-32 mcg/ml)	Low risk	25/08/2016
ASS- Ezy MIC Strips	EM144	Clotrimazole Ezy MIC Strip (CLO) (0.002-32 mcg/ml)	Low risk	25/08/2016
ASS- Ezy MIC Strips	EM145	Terbinafine Ezy MIC Strip(TRB) (0.002-32 mcg/ml)	Low risk	25/08/2016
ASS- Ezy MIC Strips	EM146	Miconazole Ezy MIC Strip (MIC) (0.002-32 mcg/ml)	Low risk	25/08/2016
ASS- Ezy MIC Strips	EM147	Flucloxacillin Ezy MIC Strip (FLC) (0.016-256 mcg/ml)	Low risk	04/07/2018
ASS- Ezy MIC Strips	EM148	Cefepime/Clavulanic acid Ezy MIC Strip (FIC) (0.016-256 mcg/ml)	Low risk	04/07/2018
ASS- Ezy MIC Strips	EM149	Ceftazidime /Tazobactam Ezy MIC Strip (CAT) (0.016-256 mcg/ml)	Low risk	04/07/2018
ASS- Ezy MIC Strips	EM150	Natamycin Ezy MIC Strip (NAT) (0.016-256 mcg/ml)	Low risk	22/04/2019
ASS- Ezy MIC Strips	EM151	Cefpirome/Sulbactam Ezy MIC™ Strip	Low risk	22/04/2019
ASS- Ezy MIC Strips	EM152	Ceftizoxime/Sulbactam Ezy MIC™ Strip	Low risk	10/11/2020
ASS- Ezy MIC Strips	EM153	Ceftazidime/Avibactam Ezy MIC™ Strip	Low risk	10/11/2020
ASS- Ezy MIC Strips	EM154	Faropenem/Clavulanic acid Ezy MIC™ strip (FAC)	Low risk	01/11/2020
ASS- Ezy MIC Strips	EM155	Cefuroxime/Clavulanic acid Ezy MIC™ strip (CXC)	Low risk	01/11/2020
ASS- Ezy MIC Strips	EM701	Xylomonas Ezy MIC Strip (0.016-256mcg/ml)	Low risk	25/08/2016
ASS- Ezy MIC Strips	EM702	Arbekacin Ezy MIC Strip (ABK) (0.016-256 mcg/ml)	Low risk	25/08/2016
ASS- Ezy MIC Strips	EM703	Garenoxacin Ezy MIC Strip (0.002-32 mcg/ml)	Low risk	25/08/2016
ASS- Ezy MIC Strips	EM705	Biapenem Ezy MIC Strip (BPM) (0.002-32 mcg/ml)	Low risk	25/08/2016
ASS- Ezy MIC Strips	EM706	Reinvexin Ezy MIC Strip (PB) (0.016-256 mcg/ml)	Low risk	16/12/2017
ASS- Sensitivity Discs (Multi Discs)	HX001	Hexa G-plus 1	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX002	Hexa G-plus 2	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX003	Hexa G-plus 3	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX004	Hexa G-plus 4	Low risk	20/12/2012

ASS- Sensitivity Discs (Multi Discs)	HX005	Hexa G-plus 5	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX006	Hexa G-minus 1	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX007	Hexa G-minus 2	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX008	Hexa G-minus 3	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX009	Hexa G-minus 4	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX010	Hexa G-minus 5	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX011	Hexa Pseudo 1	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX012	Hexa Pseudo 2	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX013	Hexa Pseudo 3	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX014	Hexa UTI-1	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX015	Hexa UTI-2	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX016	Hexa Haemophilus 1	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX017	Hexa Haemophilus 2	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX018	Hexa Haemophilus 3	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX019	Hexa Pneumococci 1	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX020	Hexa Pneumococci 2	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX021	Hexa Anaerobic 1	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX022	Hexa G-plus 6	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX023	Hexa G-plus 7	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX024	Hexa G-plus 8	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX025	Hexa G-Minus 6	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX026	Hexa Pseudo 4	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX027	Hexa G-Plus 9	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX028	Hexa G-minus 7	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX029	Hexa Pseudo 5	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX030	Hexa G-Minus 8	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX031	Hexa G-Plus 10	Low risk	20/12/2012

ASS- Sensitivity Discs (Multi Discs)	HX032	Hexa Universal - 1	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX033	Hexa UTI 3	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX034	Hexa G-plus11	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX035	Hexa G-minus 9	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX036	Hexa G-minus 29	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX037	Hexa UTI 4	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX038	Hexa Universal-2	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX039	Hexa G-plus 12	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX040	Hexa G-plus 13	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX041	Hexa Pneumococci - 3	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX042	Hexa Pneumococci-4	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX043	Hexa Pneumococci - 5	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX044	Hexa Pneumococci - 6	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX045	Hexa Pneumococci-7	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX046	Hexa Pneumococci-8	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX047	Hexa G-plus 25	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX048	Hexa G-plus 26	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX049	Hexa G-plus 27	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX050	Hexa Pseudo 6	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX051	Hexa Pseudo 7	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX052	Hexa Pseudo 8	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX053	Hexa Pseudo 9	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX054	Hexa Pseudo 10	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX055	Hexa Pseudo 11	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX056	Hexa G-minus 26	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX057	Hexa G-minus 27	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX058	Hexa G-minus 28	Low risk	20/12/2012

ASS- Sensitivity Discs (Multi Discs)	HX059	Hexa G-minus 10	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX060	Hexa G-minus 11	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX061	Hexa G-Minus 12	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX062	Hexa G-minus 13	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX063	Hexa G-minus 14	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX064	Hexa G-minus 15	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX065	Hexa G-Minus 16	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX066	Hexa G-minus 17	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX067	Hexa G-minus 18	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX068	Hexa G-minus 19	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX069	Hexa G-minus 20	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX070	Hexa G-minus 21	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX071	Hexa G-Minus 22	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX072	Hexa UTI 4 (Modified)	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX073	Hexa UTI 5	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX074	Hexa UTI 6	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX075	Hexa UTI 7	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX076	Hexa UTI 8	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX077	Hexa UTI 9	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX078	Hexa UTI 10	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX079	Hexa UTI 11	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX080	Hexa G-plus 14	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX081	Hexa G-plus 15	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX082	Hexa G-Plus 16	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX083	Hexa G-plus 17	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX084	Hexa Haemophilus 4	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX085	Hexa Haemophilus 5	Low risk	25/08/2016

ASS- Sensitivity Discs (Multi Discs)	HX086	Hexa Haemophilus 6	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX087	Hexa Haemophilus 7	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX088	Hexa Haemophilus 8	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX089	Hexa Haemophilus 9	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX090	Hexa G-plus 18	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX091	Hexa G-plus 19	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX092	Hexa G-plus 20	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX093	Hexa G-plus 21	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX094	Hexa G-Plus 22	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX095	Hexa G-minus 23	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX096	Hexa G-minus 24	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX097	Hexa Universal-2	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX098	Hexa Universal-3	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX099	Hexa UTI 12	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX100	Hexa G-Plus 23	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX101	Hexa G-plus 24	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX102	Hexa G-minus 25	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX103	Hexa Pseudo 12	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX104	Hexa Antimycyco-01	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	HX700	Hexa G-Plus 25	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX701	Hexa G-Minus 26	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX703	Hexa Pseudo-13	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX704	Hexa G-Minus 27	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX705	Hexa Anaerobic 2	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX706	Hexa UTI 14	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX707	Hexa G-Plus 26	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX708	Hexa G-Minus 28	Low risk	25/08/2016

ASS- Sensitivity Discs (Multi Discs)	HX709	Hexa Pseudo 14	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX710	Hexa UTI-15	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX711	Hexa G-Plus 27	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX712	Hexa Pseudo 15	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX713	Hexa Anaerobic-3	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX714	Hexa Combi 1	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX715	Hexa Universal 4	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX716	Hexa Universal 5	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX717	Hexa Combi 2	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX718	Hexa Combi 3	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX719	Hexa Combi 4	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX720	Hexa Combi 5	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX721	Hexa Combi 6	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX722	Hexa Combi 7	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX723	Hexa Combi 8	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	HX724	Hexa Combi 9	Low risk	28/04/2017
ASS- Sensitivity Discs (Multi Discs)	HX725	Hexa Combi 10	Low risk	28/04/2017
ASS- Sensitivity Discs (Multi Discs)	HX726	Hexa Combi 11	Low risk	28/04/2017
ASS- Sensitivity Discs (Multi Discs)	IC001	Icosa Universal - 1	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	IC002	Icosa G-I-Plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	IC003	Icosa G-I-Minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	IC004	Icosa UTI - 1	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	IC005	Icosa Pseudo - 1	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	IC006	Icosa Universal - 2	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	IC007	Icosa Pseudo - 2	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	IC008	Icosa G-II-Minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	IC701	Icosa Universal - 3	Low risk	25/08/2016

ASS- Sensitivity Discs (Multi Discs)	IC702	Icosa Universal - 4	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	IC703	Icosa Universal 5	Low risk	25/08/2016
ASS-HiComb MIC Strips	MD001	Amikacin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD002	Amoxicillin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD003	Amoxycylav (Amoxicillin/ Clavulanic acid)	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD004	Azithromycin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD005	Azlocillin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD006	Aztreonam	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD007	Carbenicillin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD008	Cefazolin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD009	Cefdinir	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD010	Cefepime	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD011	Cefpirome	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD012	Ceftazidime	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD013	Ceftriaxone	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD014	Cefalexin (Cephalexin)	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD015	Cefotaxime (Cephotaxime)	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD016	Chloramphenicol	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD017	Ciprofloxacin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD018	Clarithromycin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD019	Clindamycin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD020	Colistin (Methane Sulphonate)	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD021	Co-Trimoxazole (Sulpha/Trimethoprim)	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD022	Erythromycin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD023	Fusidic Acid	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD024	Gatifloxacin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD025	Gentamicin	Low risk	20/12/2012

ASS-HiComb MIC Strips	MD026	Kanamycin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD027	Levofloxacin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD028	Lincomycin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD029	Linezolid	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD030	Lomefloxacin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD031	Methicillin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD032	Minocycline	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD033	Moxifloxacin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD034	Mupirocin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD035	Nalidixic Acid	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD036	Neomycin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD037	Nitrofurantoin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD038	Norfloxacin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD039	Ofloxacin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD040	Pefloxacin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD041	Piperacillin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD042	Piperacillin/Tazobactam	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD043	Polymyxin-B	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD044	Pristinomylin (Quinupristin/Dalfopristin)	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD045	Rifampicin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD046	Roxithromycin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD047	Sparfloxacin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD048	Streptomycin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD049	Sulfasomidine	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD050	Sulphadiazine	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD051	Sulphafurazole (Sulfisoxazole)	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD052	Sulphamethizole	Low risk	20/12/2012

ASS-HiComb MIC Strips	MD053	Sulphamethoxypyridazine	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD054	Sulphaphenazole	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD055	Teicoplanin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD056	Tetracycline	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD057	Ticarcillin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD058	Tobramycin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD059	Trimethoprim	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD060	Vancomycin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD061	Gentamicin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD062	Benzyl Penicillin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD063	Vancomycin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD064	Cefotaxime (Cephotaxime)	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD065	Oxacillin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD066	Ceftriaxone	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD067	Amikacin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD068	Ampicillin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD069	Ceftazidime	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD070	Cefepime	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD071	Amphotericin B	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD072	Fluconazole	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD073	Itraconazole	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD074	Ketoconazole	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD076	Gemifloxacin	Low risk	20/12/2012
ASS-HiComb MIC Strips	MD701	Cefepime/Tazobactam	Low risk	25/08/2016
ASS-HiComb MIC Strips	MD702	Ceftazidime/Tazobactam	Low risk	25/08/2016
ASS-HiComb MIC Strips	MD704	Nadifloxacin	Low risk	25/08/2016
ASS-HiComb MIC Strips	MD706	Cefoperazone/Tazobactam CST	Low risk	25/08/2016

ASS-HiComb MIC Strips	MD707	Balofloxacin	Low risk	25/08/2016
ASS-HiComb MIC Strips	MD708	Cefuroxime CXM	Low risk	25/08/2016
ASS-HiComb MIC Strips	MD709	Cefpodaxime CPD	Low risk	25/08/2016
ASS-HiComb MIC Strips	MD710	Cefpodaxime / Clavulanic acid (2:1)	Low risk	25/08/2016
ASS-HiComb MIC Strips	MD711	Netilmicin NET	Low risk	25/08/2016
ASS-HiComb MIC Strips	MD712	Cefixime CFM	Low risk	25/08/2016
ASS-HiComb MIC Strips	MD713	Pazufloxacin	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD001	G-I-plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD001R	G-I-plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD002	G-II-plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD002R	G-II-plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD003	G-III-plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD0032R	Combi I	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD003R	G-III-plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD004	G-IV-plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD004R	G-IV-plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD005	G-I-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD005R	G-I-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD006	G-II-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD006R	G-II-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD007	G-III-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD007R	G-III-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD008	Pseudo	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD008R	Pseudo	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD009	UTI-I	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD009R	UTI-I	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD010	UTI-II	Low risk	20/12/2012

ASS- Sensitivity Discs (Multi Discs)	OD010R	UTI-II	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD011	G-X-plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD011R	G-X-plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD012	G-IX-plus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD012R	G-IX-plus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD014	G-IV-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD014R	G-IV-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD015	G-V-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD015R	G-V-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD016	UTI-IV	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD016R	UTI-IV	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD017	UTI-VI	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD017R	UTI-VI	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD018	UTI-VII	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD018R	UTI-VII	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD019	UTI-V	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD019R	UTI-V	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD020	Combi I	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD020R	Combi I	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD021	Combi II	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD021R	Combi II	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD022	Combi III	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD022R	Combi III	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD023	Combi IV	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD023R	Combi IV	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD024	Combi V	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD024R	Combi V	Low risk	25/08/2016

ASS- Sensitivity Discs (Multi Discs)	OD025	Combi VI	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD025R	Combi VI	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD026	Combi VII	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD026R	Combi VII	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD027	Combi VIII	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD027R	Combi VIII	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD028	Combi IX	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD028R	Combi IX	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD029	Combi X	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD029R	Combi X	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD030	Combi XI	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD030R	Combi XI	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD031	Combi XII	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD031R	Combi XII	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD032	Combi XIII	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD032R	Combi XIII	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD033	G-V-plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD033R	G-V-plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD034	G-VI-plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD034R	G-VI-plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD035	UTI III	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD035R	UTI III	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD036	Pseudo I	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD036R	Pseudo I	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD037	G-VII-plus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD037R	G-VII-plus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD038	G-VIII-plus	Low risk	20/12/2012

ASS- Sensitivity Discs (Multi Discs)	OD038R	G-VIII-plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD039	G-XI-plus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD039R	G-XI-plus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD040	UTI-VIII	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD040R	UTI-VIII	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD041	G-XII-plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD041R	G-XII-plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD042	G-VI-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD042R	G-VI-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD043	G-VII-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD043R	G-VII-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD044	G-VIII-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD044R	G-VIII-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD045	G-IX-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD045R	G-IX-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD046	G-X-minus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD046R	G-X-minus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD047	G-XI-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD047R	G-XI-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD048	UTI-IX	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD048R	UTI-IX	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD049	G-XIII- plus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD049R	G-XIII- plus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD050	G-XIV- plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD050R	G-XIV- plus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD051	UTI-X	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD051R	UTI-X	Low risk	20/12/2012

ASS- Sensitivity Discs (Multi Discs)	OD052	UTI-XI	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD052R	UTI-XI	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD053	G-XII-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD053R	G-XII-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD054	UTI-XII	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD054R	UTI-XII	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD055	G-XIII-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD055R	G-XIII-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD056	Combi 59	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD056R	Combi 59	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD057	G-XVIII-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD057R	G-XVIII-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD058	G-XIX-minus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD058R	G-XIX-minus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD059	G-XX-minus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD059R	G-XX-minus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD060	G-XXI-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD060R	G-XXI-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD061	G-XXII-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD061R	G-XXII-minus	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD062	G-XXIII-minus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD062R	G-XXIII-minus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD063	Pseudo V	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD063R	Pseudo V	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD064	Combi-XIV	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD064R	Combi XIV	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD065	UTI-XVII	Low risk	25/08/2016

ASS- Sensitivity Discs (Multi Discs)	OD065R	UTI-XVII	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD066	Combi 82	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD066R	Combi 82	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD067	Combi 83	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD067R	Combi 83	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD202	Comb XXI	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD209	Combi 28	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD211	Combi 30	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD211R	Combi 30	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD212	Combi 31	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD215	Combi 34	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD215R	Combi 34	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD216	Combi 35	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD216R	Combi 35	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD220	Combi 39	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD221	Combi 40	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD223	G XIV minus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD224	G XV plus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD225	UTI XIII	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD226	Combi 41	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD227	UTI-XIV	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD228	Pseudo II	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD229	G-XV-minus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD230	G-XVI-plus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD231	Combi -42	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD232	Combi 43	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD233	Combi 44	Low risk	25/08/2016

ASS- Sensitivity Discs (Multi Discs)	OD233R	Combi 44	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD234	Combi 45	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD234R	Combi 45	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD241	Combi 49	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD241R	Combi 49	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD243	G XVII minus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD244	G XIX plus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD248	Combi-53	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD249	Combi-54	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD250	Pseudo - III for Pseudomonas	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD251	GXX plus	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD253	Combi 56	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD256	Combi 59	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD256R	Combi 59	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD257	Combi 60	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD257R	Combi 60	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD258	Combi 61	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD258R	Combi 61	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD259	Combi 62	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD259R	Combi 62	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD260	UTI-XIII	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD261	UTI-XIV	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD262	UTI-E	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD263	UTI-XV	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD264	Pseudo II	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD265	Combi 63	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD266	Combi 64	Low risk	25/08/2016

ASS- Sensitivity Discs (Multi Discs)	OD267	Combi 65	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD268	Combi 66	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD269	Combi 67	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD269R	Combi 67	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD270	Combi 68	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD270R	Combi 68	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD271	Combi 69	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD271R	Combi 69	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD272	Combi 70	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD272R	Combi 70	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD273	Combi 71	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD273R	Combi 71	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD274	Combi 72	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD274R	Combi 72	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD275	Combi 73	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD275R	Combi 73	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD275RS	Combi 60	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD275S	Combi 60	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD276	Combi 84	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD276R	Combi 84	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD277	Combi 77	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD277R	Combi 77	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD278	Combi 78	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD278R	Combi 78	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD279	Combi 79	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD279R	Combi 79	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD280	Combi 80	Low risk	20/12/2012

ASS- Sensitivity Discs (Multi Discs)	OD280R	Combi 80	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD281	Combi 85	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD281R	Combi 85	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD282	Combi 505	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD282R	Combi 505	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD283	Combi 506	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD283R	Combi 506	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD284	Combi 508	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD284R	Combi 508	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD285	Combi 509	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD285R	Combi 509	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD286	Combi 510	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD286R	Combi 510	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD287	Combi 511	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD287R	Combi 511	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD288	Combi 512	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD288R	Combi 512	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD289	Combi 513	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD289R	Combi 513	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD290	Combi 514	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD290R	Combi 514	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD291	Combi 90	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD291R	Combi 90	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD292	Combi 91	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD292R	Combi 91	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD293	Combi 92	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD293R	Combi 92	Low risk	20/12/2012

ASS- Sensitivity Discs (Multi Discs)	OD294	Combi 93	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD294R	Combi 93	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD295	Combi 516	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD295R	Combi 516	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD296	Combi 517	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD296R	Combi 517	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD297	Combi 518	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD297R	Combi 518	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD298	Combi 94	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD298R	Combi 94	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD299	Combi 95	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD299R	Combi 95	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD300	Combi 96	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD300R	Combi 96	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD301	G minus-24	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD301R	G minus-24	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD302	G minus-25	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD302R	G minus-25	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD303	G Plus-15	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD303R	G Plus-15	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD304	G Plus-16	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD304R	G Plus-16	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD305	G Plus-17	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD305R	G Plus-17	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD306	UTI-18	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD306R	UTI-18	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD307	Pseudo VI	Low risk	20/12/2012

ASS- Sensitivity Discs (Multi Discs)	OD307R	Pseudo VI	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD308	Universal - 1	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD308R	Universal - 1	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD309	G Plus-18	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD309R	G Plus-18	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD310	G minus-26	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD310R	G minus-26	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD311	G minus-27	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD311R	G minus-27	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD312	G Minus - 28	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD312R	G Minus - 28	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD313	G Minus - 29	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD313R	G Minus - 29	Low risk	20/12/2012
ASS- Sensitivity Discs (Multi Discs)	OD704	Combi 77	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD705	Combi 78	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD706	Combi 79	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD707	Combi 80	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD708	Combi 81	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD709	Combi 85	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD710	Combi 86	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD711	Combi 501	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD712	Combi 502	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD713	Combi 503	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD714	Combi 504	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD715	Combi 505	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD716	Combi 506	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD717	Octodiscs-A	Low risk	25/08/2016

ASS- Sensitivity Discs (Multi Discs)	OD718	Octodiscs-B	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD719	Octodiscs-C	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD720	Octodiscs-D	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD721	Octodiscs-E	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD722	Octodiscs-F	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD723	Octodiscs-G	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD724	Combi 507	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD725	Combi 508	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD726	Combi 509	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD727	Combi 510	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD728	Combi 511	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD729	Combi 512	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD730	Combi 513	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD731	Combi 514	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD732	Combi 515	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD733	Combi 516	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD734	Combi 517	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD735	Combi 518	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD736R	Combi 519	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD737	Combi 520	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD737R	Combi 520	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD738	Combi 521	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD738R	Combi 521	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD739	Combi 522	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD739R	Combi 522	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD740	Combi 523	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD740R	Combi 523	Low risk	25/08/2016

ASS- Sensitivity Discs (Multi Discs)	OD741	Combi 524	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD741R	Combi 524	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD742	Combi 525	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD742R	Combi 525	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD743	Combi 526	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD743R	Combi 526	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD744	Combi 527	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD744R	Combi 527	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD745	Combi 528	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD745R	Combi 528	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD746	Combi 529	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD746R	Combi 529	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD747	Combi 530	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD747R	Combi 530	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD748	Combi 531	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD748R	Combi 531	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD749	Combi 532	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD749R	Combi 532	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD750	Combi 533	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD750R	Combi 533	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD751	Combi 534	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD751R	Combi 534	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD752	Combi 535	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD752R	Combi 535	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD753	Combi 536	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD753R	Combi 536	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD754	Combi 537	Low risk	25/08/2016

ASS- Sensitivity Discs (Multi Discs)	OD754R	Combi 537	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD755	Combi 538	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD755R	Combi 538	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD756	Combi 539	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD756R	Combi 539	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD757	Combi 540	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD757R	Combi 540	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD758	Combi 541	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD758R	Combi 541	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD759	Combi 542	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD759R	Combi 542	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD760	Combi 543	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD760R	Combi 543	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD761	Combi 544	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD761R	Combi 544	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD762	Combi 545	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD762R	Combi 545	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD763	Combi 546	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD763R	Combi 546	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD764	Combi 547	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD764R	Combi 547	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD765	Combi 548	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD765R	Combi 548	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD766	Combi 549	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD766R	Combi 549	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD767	Combi 550	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD767R	Combi 550	Low risk	25/08/2016

ASS- Sensitivity Discs (Multi Discs)	OD768	Combi 551	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD768R	Combi 551	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD769	Combi 552	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD769R	Combi 552	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD770	Combi 553	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD770R	Combi 553	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD771	Combi 554	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD771R	Combi 554	Low risk	25/08/2016
ASS- Sensitivity Discs (Multi Discs)	OD772	Combi 555	Low risk	16/12/2017
ASS- Sensitivity Discs (Multi Discs)	OD772R	Combi 555	Low risk	16/12/2017
ASS- Sensitivity Discs (Multi Discs)	OD773	Combi 556	Low risk	16/12/2017
ASS- Sensitivity Discs (Multi Discs)	OD773R	Combi 556	Low risk	16/12/2017
ASS- Sensitivity Discs (Multi Discs)	OD774	Combi 557	Low risk	16/12/2017
ASS- Sensitivity Discs (Multi Discs)	OD774R	Combi 557	Low risk	16/12/2017
ASS- Sensitivity Discs (Multi Discs)	OD775	Combi 558	Low risk	16/12/2017
ASS- Sensitivity Discs (Multi Discs)	OD775R	Combi 558	Low risk	16/12/2017
ASS- Sensitivity Discs (Multi Discs)	OD776	Combi 559	Low risk	04/07/2018
ASS- Sensitivity Discs (Multi Discs)	OD776R	Combi 559	Low risk	04/07/2018
ASS- Sensitivity Discs (Multi Discs)	OD777	Combi 560	Low risk	04/07/2018
ASS- Sensitivity Discs (Multi Discs)	OD777R	Combi 560	Low risk	04/07/2018
ASS- Sensitivity Discs (Multi Discs)	OD778	Combi 561	Low risk	04/07/2018
ASS- Sensitivity Discs (Multi Discs)	OD778R	Combi 561	Low risk	04/07/2018
ASS- Sensitivity Discs (Multi Discs)	OD779	Combi 562	Low risk	22/04/2019
ASS- Sensitivity Discs (Multi Discs)	OD779R	Combi 562	Low risk	22/04/2019
ASS- Sensitivity Discs (Multi Discs)	OD780	Combi 563	Low risk	10/11/2020
ASS- Sensitivity Discs (Multi Discs)	OD780R	Combi 563	Low risk	10/11/2020
ASS- Sensitivity Discs (Multi Discs)	OD781	Combi 564	Low risk	10/11/2020

ASS- Sensitivity Discs (Multi Discs)	OD781R	Combi 564	Low risk	10/11/2020
ASS- Sensitivity Discs (Multi Discs)	OD782	Combi 565	Low risk	10/11/2020
ASS- Sensitivity Discs (Multi Discs)	OD782R	Combi 565	Low risk	10/11/2020
ASS- Sensitivity Discs (Multi Discs)	OD783	Combi 566	Low risk	10/11/2020
ASS- Sensitivity Discs (Multi Discs)	OD783R	Combi 566	Low risk	10/11/2020
ASS- Sensitivity Discs (Multi Discs)	OD784	Combi 567	Low risk	10/11/2020
ASS- Sensitivity Discs (Multi Discs)	OD784R	Combi 567	Low risk	10/11/2020
ASS- Sensitivity Discs (Single Discs)	SD001	Amoxycillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD002	Ampicillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD002A	Ampicillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD003	Bacitracin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD004	Carbenicillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD005	Cefaloridine (Cephaloridine)	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD006	Chloramphenicol	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD006B	Chloramphenicol(2 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD007	Chlortetracycline	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD008	Cloxacillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD009	Colistin (Methane Sulphonate)	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD010	Co-Trimoxazole (Sulpha/Trimethoprim)	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD012	Doxycycline Hydrochloride	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD013	Erythromycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD014	Framycetin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD015	Furazolidone	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD016	Gentamicin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD017	Kanamycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD018	Lincomycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD019	Methicillin	Low risk	20/12/2012

ASS- Sensitivity Discs (Single Discs)	SD020	Metronidazole	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD021	Nalidixic Acid	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD022	Neomycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD023	Nitrofurantoin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD023A	Nitrofurantoin	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD024	Nitrofurazone	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD025	Nystatin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD026	Oleandomycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD027	Oxytetracycline	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD028	Penicillin-G	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD029	Polymyxin-B	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD030	Rifampicin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD031	Streptomycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD032	Sulphafurazole (Sulfisoxazole)	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD033	Sulphamethizole	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD034	Sulphadiazine	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD035	Amikacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD036	Sulphaphenazole	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD037	Tetracycline	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD038	Triple Sulphas	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD039	Trimethoprim	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD040	Cefotaxime	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD040A	Cefotaxime	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD041	Cefoxitin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD042	Furoxone	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD043	Oxacillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD044	Tobramycin	Low risk	20/12/2012

ASS- Sensitivity Discs (Single Discs)	SD045	Vancomycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD046	Netillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD047	Cefazolin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD048	Cefalexin(Cephalexin)	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD049	Cycloserine	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD050	Cephalothin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD051	Clindamycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD052	Dicloxacillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD053	Novobiocin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD054	Spiramycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD055	Sulphamethoxyypyridazine	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD056	Sulfasomidine	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD056A	Sulphamethoxazole	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD057	Norfloxacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD058	Co-Trimazine (Vet.)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD059	Sisomicin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD060	Ciprofloxacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD060A	Ciprofloxacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD061	Cefuroxime	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD062	Ceftazidime	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD062A	Ceftazidime	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD063	Amoxyclav (Amoxicillin/Clavulanic acid)	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD063A	Augmentine	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD064	Azlocillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD065	Ceftriaxone	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD066	Piperacillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD066A	Piperacillin	Low risk	20/12/2012

ASS- Sensitivity Discs (Single Discs)	SD067	Sterile Discs	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD068	Methanamine Mandalate	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD069	Ofloxacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD070	Pefloxacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD071	Co-Trimazine (Human)	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD072	Cefoperazone	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD073	Imipenem	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD074	Ticarcillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD075	Cloxacillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD076	Amoxicillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD077	Ampicillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD078	Amoxyclav	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD079	Cefaloridine	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD080	Ciprofloxacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD081	Chloramphenicol	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD082	Amikacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD083	Erythromycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD084	Lincomycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD085	Netillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD086	Nitrofurantoin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD087	Ofloxacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD088	Oxacillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD089	Penicillin-G	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD090	Nitrofurantoin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD091	Streptomycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD092	Sulphadiazine	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD093	Trimethoprim	Low risk	20/12/2012

ASS- Sensitivity Discs (Single Discs)	SD094	Azlocillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD096	Rifampicin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD097	Colistin (Methane Sulphonate)	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD098	Lincomycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD099	Metronidazole	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD101	Spiramycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD102	Penicillin-G (1.5 units)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD103	Nitrofurantoin NIT	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD104	Neomycin N	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD105	Bacitracin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD106	Polymyxin-B	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD107	Metronidazole	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD108	Colistin (Methane Sulphonate)	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD109	Ceftriaxone	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD110	Ceftizoxime	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD111	Amphotericin-B	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD112	Ampicillin/Sulbactam	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD113	Ampicillin/Cloxacillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD114	Fluconazole	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD115	Clotrimazole	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD116	Cefadroxil (Cephadroxil)	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD117	Bacitracin (0.1 units)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD118	Bacitracin (2 units)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD119	Bacitracin (1 unit)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD120	Doxycycline Hydrochloride	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD121	Novobiocin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD123	Tetracycline T	Low risk	25/08/2016

ASS- Sensitivity Discs (Single Discs)	SD124	Azithromycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD125	Lomefloxacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD126	Roxithromycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD127	Rifampicin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD128	Rifampicin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD129	Amoxicillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD130	Cephaloridine	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD131	Chloramphenicol	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD132	Piperacillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD133	Tetracycline	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD134	Tobramycin TB	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD135	Trimethoprim	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD136	Methicillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD137	Methicillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD138	Erythromycin	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD139	Polymyxin-B	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD140	Floxidin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD141	Floxidin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD142	Ciprofloxacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD143	Cloxacillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD144	Penicillin-G	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD145	Penicillin-G	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD147	Tetracycline	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD148	Trimethoprim	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD149	Trimethoprim	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD150	Enrofloxacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD152	Penicillin-G	Low risk	25/08/2016

ASS- Sensitivity Discs (Single Discs)	SD153	Chloramphenicol	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD154	Tobramycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD155	Vancomycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD156	Enrofloxacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD157	Cefaclor	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD158	Minocycline	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD159	Cephradine	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD160	Cefradine	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD161	Trimethoprim	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD162	Sparfloxacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD163	Vancomycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD164	Clindamycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD165	Cloxacillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD166	Gentamicin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD167	Penicillin-G	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD168	Ceftriaxone Ci	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD169	Fusidic Acid	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD170	Gentamicin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD171	Fusidic Acid	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD174	Polymyxin-B Pb	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD175	Pipemidic Acid	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD176	Mecillinam	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD177	Mecillinam	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD178	Pristinomycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD179	Fosfomycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD180	Oxolinic Acid (10 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD181	Spectinomycin	Low risk	20/12/2012

ASS- Sensitivity Discs (Single Discs)	SD182	Virginamycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD184	Norfloxacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD185	Pipemidic Acid	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD186	Oxolinic Acid (2 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD187	Flumequine (2 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD188	Dibekacine (10 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD189	Oxolinic Acid (5 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD190	Flumequine (5 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD191	Kanamycin (1 mcg) (K1)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD192	Clarithromycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD195	Gentamicin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD196	Nitroxoline	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD197	Furazolidone	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD198	Flumequine	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD199	Tylosine	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD200	Cefamandole	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD201	Ticarcillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD203	Cefoperazone	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD204	Azithromycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD205	Fosfomycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD206	Lomefloxacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD207	Ceftazidime /Clavulanic acid	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD209	Cefprozil	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD210	Piperacillin/Tazobactam	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD211	Cefixime	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD212	Aztreonam	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD213	Teicoplanin	Low risk	20/12/2012

ASS- Sensitivity Discs (Single Discs)	SD214	Isepamicin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD215	Linezolid	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD216	Levofloxacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD217	Moxifloxacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD218	Cefdinir	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD219	Cefepime	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD220	Moxalactam	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD221	Itraconazole	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD222	Erythromycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD223	Kanamycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD224	Ketoconazole	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD225	Mezlocillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD231	Cefoperazone :Sulbactam (30mcg:10mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD232	Fluconazole	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD233	Amphotericin B	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD234	Cefepime	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD235	Cefpirome	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD236	Streptomycin For detection of HLAR Strains.	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD237	Enoxacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD238	Kit I for ESBL Identification, Cefotaxime (Cephotaxime) Kit contains 6 cartridges (6CT): 3CT of SD040 Cefotaxime (Cephotaxime) 30 mcg, 3CT of SD724 Cefotaxime (Cephotaxime)/Clavulanic acid 30/10 mcg	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD239	Kit II for ESBL Identification, Cefepime Kit contains 6 cartridges (6CT): 3CT of SD219 Cefepime 30 mcg, 3CT of SD234 Cefepime /Clavulanic acid 30/10 mcg	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD240	Kit III for ESBL Identification, Ceftazidime Kit contains 6 cartridges (6CT): 3CT of SD062 Ceftazidime 30 mcg, 3CT of SD207 Ceftazidime /Clavulanic acid 30/10 mcg	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD241	Kit IV for ESBL Identification, Cefpirome Kit contains 6 cartridges (6CT): 3CT of SD738 Cefpirome 30 mcg, 3CT of SD235 Cefpirome /Clavulanic acid 30/7.5 mcg	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD242	Kit V for ESBL identif	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD243	Amoxyclav (Amoxycillin / Clavulanicacid)	Low risk	25/08/2016

ASS- Sensitivity Discs (Single Discs)	SD244	Cefmetazole	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD245	Cinoxacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD246	Nafcillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD247	Cefepime/Tazobactam	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD248	Cefonicid	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD249	Cefotetan	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD250	Gemifloxacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD251	Ceftriaxone/Tazobactam	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD252	Ceftazidime/Tazobactam	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD253	Cefoperazone/Tazobactam	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD254	Cefoperazone/	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD255	Cefpodoxime/ Clavulanic acid	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD256	Ceftriaxone/Tazobactam	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD257	Cefepime/Tazobactam	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD258	Nadifloxacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD259	Cefoperazone/Sulbactam	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD260	Lomefloxacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD261	Ceftriaxone/ Sulbactam	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD262	Cefepime	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD263	Aztreonam	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD264	Amoxicillin/	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD265	Imipenem/Cilastin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD266	Cefixime/	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD267	Prulifloxacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD268	Prulifloxacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD269	Ceftazidime/Tazobactam	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD270	Amphotericin B	Low risk	20/12/2012

ASS- Sensitivity Discs (Single Discs)	SD271	Nystatin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD272	Miconazole	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD273	Miconazole	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD274	Ketoconazole	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD275	Ketoconazole	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD276	Itraconazole	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD277	Voriconazole	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD278	Tigecycline	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD279	Faropenem	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD280	Ertapenem	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD281	Amoxyclav	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD282	Imipenem-EDTA	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD283	Doripenem	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD284	Cloxacillin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD285	Cefoxitin-	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD286	Amoxicillin/Sulbactam	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD287	Ampicillin/Sulbactam	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD288	Cefotaxime CTX	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD289	Ceftriaxone CTR	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD290E	Ceftaroline	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD291E	Telithromycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD292E	Piperacillin / Tazobactam	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD293E	Mupirocin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD294E	Ceftibuten	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD295E	Cefotaxime CTX	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD296E	Linezolid LZ	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD297	Colistin Sulphate	Low risk	17/06/2021

ASS- Sensitivity Discs (Single Discs)	SD298	Caspofungin	Low risk	17/06/2021
ASS- Sensitivity Discs (Single Discs)	SD701	Carbenicilline	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD704	Cefradine	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD705	Amoxicillin (2 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD709	Novobiocin (5mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD712	Oleandomycin (5 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD715	Fluconazole (25 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD722	Penicillin-G (2mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD723	Ampicillin (20mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD724	Cefotaxime/Clavulanic acid (30/10 mcg)	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD725	Cefpodoxime	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD726	Ceftazimide/Clavulinic (3/10 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD727	Meropenem	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD730	Metronidazole (50 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD731	Neomycin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD732	Novobiocin (5mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD736	Bacitracin B 0.05 units /disc	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD737	Gatifloxacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD738	Cefpirome (Cfp) (30mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD740	Gatifloxacin	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD741	Cephotaxime/Sulbactam (30/15 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD744	Ofloxacin Of 30 mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD745	Norfloxacin (30mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD746	Gentamicin (200mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD748	Mupirocin MU 5 mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD751	Cefpodoxime/ Clavulanic acid (10/1 MCG)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD753	Gatifloxacin	Low risk	20/12/2012

ASS- Sensitivity Discs (Single Discs)	SD755	Ceftiofur (0.2mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD756	Ceftiaxone (30 mcg) / Sulbactam (15 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD761	Sparfloxacin Sc (10mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD764	Ceftriaxone/ Tazobactam (80/10 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD765	Gemifloxacin (GEM) 5mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD767	Ceftazidime-Tazobactam (CaT) (30/10 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD768	Cefoperazone-tazobactam (75/10mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD769	Cefoperazone-Sulbactam (Cfs) (75/10 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD770	Cefepime/Tazobactam (30/10 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD771	Cefpodoxime / Clavulanic acid (10/5 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD773	Piperacillin / Sulbactam (100/10 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD774	Faropenem (5 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD775	Ceftriaxone (30 mcg) / Tazobactam (10 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD776	Cefepime (80 mcg) / Tazobactam (10 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD777	Nadifloxacin (5 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD779	Cefoperazone / Sulbactam (50 / 50 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD780	Lomefloxacin Lo (15 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD781	Cefixime/Clavulanic acid Cmc (200/125 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD782	Cefepime Cpm (50 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD783	Aztreonam Ao (50 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD784	Amoxicillin/Sulbactam Ams (30/15 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD785	Imipenem/Cilastatin Ic (10/10 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD786	Cefixime / Clavulanic acid Cmc (5/10 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD787	Prulifloxacin Pr (10 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD788	Prulifloxacin Pr (5 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD789	Ceftriaxone / Sulbactam (500/250 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD790	Ceftriaxone / Sulbactam (1000/500 mcg)	Low risk	25/08/2016

ASS- Sensitivity Discs (Single Discs)	SD791	Piperacillin + Tazobactam (80:10 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD792	Pazufloxacin (PZ) (25 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD793	Cefditoren (10 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD794	Cefpodoxime/Clavulanic acid (10/6.25mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD795	Cefipime / Amikacin (30 / 7.5 mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD796	Cefepime / Sulbactam (30/15 mcg) CPS	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD797	Ceftazidime / Sulbactam (30/15 mcg) CAS	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD798	Ceftriaxone/Tobramycin (30/5.4 mcg) CTB	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD799	Ceftriaxone/Vancomycin (30/15 mcg) CVA	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD800	Cefpirome / Sulbactam (30/15 mcg) CRS	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD801	Cefaperazone/Sulbactam (70/35mcg)(CSB)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD802	Ceftazidime Tobramycin (30+3.6 mcg) CFT	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD803	Amoxicillin/Clavulanic acid AC 50/10 mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD804	Cefpodoxime / Clavulanic acid (24:15mcg)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD805	Cefixime : Ofloxacin COF 5:5 mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD806	Balofloxacin BF 5 mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD807	Tigecycline TGC 20 mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD808	Ampicillin / Cloxacillin 128/128µg Ax	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD809	Amoxicillin/Cloxacillin 128/128µg ACX	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD810	Gentamicin GEN 128µg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD811	Enrofloxacin EX 8µg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD812	Ciprofloxacin CIP 8µg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD813	Tetracyclin TE 128µg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD814	Chloramphenicol C 8 mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD815	Streptomycin/Penicillin SPN 128/128mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD816	Ceftazidime/Tobramycin CFT 30/10mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD816V	Ceftazidime/Tobramycin CFT (30:10)	Low risk	25/08/2016

ASS- Sensitivity Discs (Single Discs)	SD817	Cefepime / Amikacin CPA 30/10mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD818	Balofloxacin BF 10mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD819	Oxacillin Ox 10mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD820	Cefixime	Low risk	20/12/2012
ASS- Sensitivity Discs (Single Discs)	SD821	Cefpodoxim CPD 30mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD822	Garenoxacin GRN 5 mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD823	Sitafloxacin STX 5 mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD824	Tosufloxacin TOS 5 mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD825	Biapenem BPM 10 mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD826	Cefepime Amikacin 58.8:14.6.mcg CPA	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD827	Florfenikol FLO 30mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD828	Cefpodoxime:Levofloxacin 10:5 mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD829	Meropenem/Sulbactam MRS 10:5 mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD830V	Ceftriazone Vancomycin CVA (30:30)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD831	Ampicillin/Sulbactam (A/S) 20:10	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD832	Cefixime : Azithromycin CFA 5:15 mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD833	Cefquinome CEQ 30mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD834	Ceftriaxone CTR 128 mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD835	Sulphatrimethoprim STM 128/128 mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD836	Erythromycin E 60 mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD837	Kanmycin K 1000 mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD838	Quninupristin/Dalfopristin RP 15/15 mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD839	Levofloxacin/Cefpodoxime LEC 250 : 200 mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD840	Ampicillin/Sulbactam A/S 20/12.5 mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD841	Garenoxacin GRN 1mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD842	Garenoxacin GRN 5mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD843	Mipenem (Meropenem) MIP 10 mcg	Low risk	25/08/2016

ASS- Sensitivity Discs (Single Discs)	SD844	Ranicef (Cefdinir) RNF 5 mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD845	Clavamox (Amoxicillin / Clavulanic acid)	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD846	Ciprotab (Ciprofloxacin) CPT 5 mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD847	Ciprotab (Ciprofloxacin) CPT 10mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD848	Meropenem/Sulbactam MRS 2/200mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD849	Flucloxacillin FCO 30mcg	Low risk	25/08/2016
ASS- Sensitivity Discs (Single Discs)	SD850	Cefuroxime/Clavulanic acid CCV 30/7.5mcg	Low risk	28/04/2017
ASS- Sensitivity Discs (Single Discs)	SD851	Cefixime/Dicloxacillin CDC 5/12.5mcg	Low risk	28/04/2017
ASS- Sensitivity Discs (Single Discs)	SD852	Cefpodoxime / Clavulanic acid CCL 10/5mcg	Low risk	16/12/2017
ASS- Sensitivity Discs (Single Discs)	SD853	Nafithromycin NFT 15mcg	Low risk	30/10/2018
ASS- Sensitivity Discs (Single Discs)	SD854	Levonadifloxacin LND 10mcg	Low risk	30/10/2018
ASS- Sensitivity Discs (Single Discs)	SD855	Dicrysticin-S DCR 50mcg	Low risk	22/04/2019
ASS- Sensitivity Discs (Single Discs)	SD856	Garenoxacin GRN 10mcg	Low risk	22/04/2019
ASS- Sensitivity Discs (Single Discs)	SD857	Cefepime / sulbactam	Low risk	10/11/2020
ASS- Sensitivity Discs (Single Discs)	SD858	Cefotaxime / Sulbactam	Low risk	10/11/2020
ASS- Sensitivity Discs (Single Discs)	SD859	Ceftizoxime / Sulbactam	Low risk	10/11/2020
ASS- Sensitivity Discs (Single Discs)	SD860	Meropenem / EDTA	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM001	Amikacin HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM002	Amoxicillin HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM003	Amoxyclav HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM068	Ampicillin HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM109	Ampicillin /Sulbactam HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM070	Cefepime HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM064	Cefotaxime HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM101	Cefoxitin HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM012	Ceftazidime HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM066	Ceftriaxone HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM016	Chloramphenicol HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM017	Ciprofloxacin HiComb™ MIC Strip, Modified	Low risk	10/11/2020

ASS-HiComb™ MIC Strip, Modified	MDM020	Colistin HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM108	Fosfmycin HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM025	Gentamicin HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM080	Meropenem HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM065	Oxacillin HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM084	Penicillin HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM043	Polymyxin B HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM055	Teicoplanin HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM056	Tetracycline HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM089	Tigecycline HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM059	Trimethoprim HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM060	Vancomycin HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM071	Amphotericin B HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM072	Fluconazole HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiComb™ MIC Strip, Modified	MDM086	Voriconazole HiComb™ MIC Strip, Modified	Low risk	10/11/2020
ASS-HiMIC™ Plate Kit	MPK001	Amikacin HiMIC™ Plate Kit (contains HMP001,LQ314II,PW1378,R-MPK001)	Low risk	10/11/2020
ASS-HiMIC™ Plate Kit	MPK068	Ampicillin HiMIC™ Plate Kit (contains HMP068,LQ314II,PW1378,R-MPK068)	Low risk	10/11/2020
ASS-HiMIC™ Plate Kit	MPK109	Ampicillin/Sulbactam HiMIC™ Plate Kit (contains HMP109,LQ314II,PW1378,R-MPK109)	Low risk	10/11/2020
ASS-HiMIC™ Plate Kit	MPK071	Amphotericin B HiMIC™ Plate Kit (contains HMP071,LQ314I,PW1378,R-MPK071)	Low risk	17/06/2021
ASS-HiMIC™ Plate Kit	MPK070	Cefepime HiMIC™ Plate Kit (contains HMP070,LQ314I,PW1378,R-MPK070)	Low risk	10/11/2020
ASS-HiMIC™ Plate Kit	MPK101	Cefoxitin HiMIC™ Plate Kit (contains HMP101,LQ314II,PW1378,R-MPK101)	Low risk	10/11/2020
ASS-HiMIC™ Plate Kit	MPK012	Ceftazidime HiMIC™ Plate Kit (contains HMP012,LQ314II,PW1378,R-MPK012)	Low risk	10/11/2020
ASS-HiMIC™ Plate Kit	MPK016	Chloramphenicol HiMIC™ Plate Kit (contains HMP016,LQ314II,PW1378,R-MPK016)	Low risk	10/11/2020
ASS-HiMIC™ Plate Kit	MPK017	Ciprofloxacin HiMIC™ Plate Kit (contains HMP017,LQ314II,PW1378,R-MPK017)	Low risk	10/11/2020
ASS-HiMIC™ Plate Kit	MPK019	Clindamycin HiMIC™ Plate Kit (contains HMP019,LQ314II,PW1378,R-MPK019)	Low risk	10/11/2020
ASS-HiMIC™ Plate Kit	MPK020	Colistin HiMIC™ Plate Kit (contains HMP020,LQ314II,PW1378,R-MPK020)	Low risk	10/11/2020

ASS-HiMIC™ Plate Kit	MPK085	Ertapenem HiMIC™ Plate Kit (contains HMP085,LQ314II,PW1378,R-MPK085)	Low risk	10/11/2020
ASS-HiMIC™ Plate Kit	MPK025	Gentamicin HiMIC™ Plate Kit (contains HMP025,LQ314II,PW1378,R-MPK025)	Low risk	10/11/2020
ASS-HiMIC™ Plate Kit	MPK104	Imipenem HiMIC™ Plate Kit (contains HMP104,LQ314II,PW1378,R-MPK104)	Low risk	10/11/2020
ASS-HiMIC™ Plate Kit	MPK156	Isavuconazole HiMIC™ Plate Kit (contains HMP156,LQ314I,PW1378,R-MPK156)	Low risk	17/06/2021
ASS-HiMIC™ Plate Kit	MPK073	Itraconazole HiMIC™ Plate Kit (contains HMP073,LQ314I,PW1378,R-MPK073)	Low risk	17/06/2021
ASS-HiMIC™ Plate Kit	MPK080	Meropenem HiMIC™ Plate Kit (contains HMP080,LQ314I,PW1378,R-MPK080)	Low risk	10/11/2020
ASS-HiMIC™ Plate Kit	MPK084	Penicillin HiMIC™ Plate Kit (contains HMP084,LQ314II,PW1378,R-MPK084)	Low risk	10/11/2020
ASS-HiMIC™ Plate Kit	MPK042	Piperacillin/Tazobactam HiMIC™ Plate Kit (contains HMP042,LQ314I,PW1378,R-MPK042)	Low risk	10/11/2020
ASS-HiMIC™ Plate Kit	MPK043	Polymyxin B HiMIC™ Plate Kit (contains HMP043,LQ314II,PW1378,R-MPK043)	Low risk	10/11/2020
ASS-HiMIC™ Plate Kit	MPK120	Posaconazole HiMIC™ Plate Kit (contains HMP120,LQ314II,PW1378,R-MPK120)	Low risk	17/06/2021
ASS-HiMIC™ Plate Kit	MPK055	Teicoplanin HiMIC™ Plate Kit (contains HMP055,LQ314II,PW1378,R-MPK055)	Low risk	10/11/2020
ASS-HiMIC™ Plate Kit	MPK089	Tigecycline HiMIC™ Plate Kit (contains HMP089,LQ314II,PW1378,R-MPK089)	Low risk	10/11/2020
ASS-HiMIC™ Plate Kit	MPK060	Vancomycin HiMIC™ Plate Kit (contains HMP060,LQ314II,PW1378,R-MPK060)	Low risk	10/11/2020
ASS-HiMIC™ Plate Kit	MPK086	Variconazole HiMIC™ Plate Kit (contains HMP086,LQ314II,PW1378,R-MPK086)	Low risk	17/06/2021

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HiMedia Laboratories Pvt. Ltd.

Plot No. C40, Road - 21Y, WAGLE Industrial Estate,
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QUALITY MANAGEMENT SYSTEM

complying with the requirements of standard

ISO 13485:2016

Medical devices - Quality management systems -
Requirements for regulatory purposes

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Design, Development & Manufacturing of Biosciences Products for application in Microbiology, Cell Biology & Molecular Biology Products.

Registration No.: M-00391/0

Date of initial issue: 28 February 2022


Valid until: 27 February 2028

Vienna, 10 March 2025

The validity of the **qualityaustria** certificate will be maintained by annual surveillance audits and one renewal audit after three years.

Quality Austria Certification GmbH,
AT-1010 Vienna, Zelinkagasse 10/3



 **qualityaustria**

MEMBER OF



Mag. Christoph Mondl
CEO



Mag. Dr. Werner Paar
CEO



Ing. Christoph Baumgartner, MSc, MBA
Authorised representative,
management Customer Service Center

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QUALITY MANAGEMENT SYSTEM
complying with the requirements of standard
ISO 9001:2015

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The current validity of the certificate is documented exclusively on the Internet under <http://www.qualityaustria.com/en/cert>

Design, Development & Manufacturing of Microbiology, Cell Biology, Plant Tissue Culture & Molecular Biology Products and Trading of Allied Plastic-ware, Lab Aid Instrument and Consumables (Sterile Disposable Petri Dishes, Sterile Swabs, Sterile Loops and Spreaders)

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Registration No.: Q-27302/0

Date of initial issue: 28 February 2022

Valid until: 27 February 2028

Vienna, 10 March 2025

Quality Austria Certification GmbH,
AT-1010 Vienna, Zelinkagasse 10/3



Mag. Christoph Mondl
CEO



Mag. Dr. Werner Paar
CEO



Ing. Christoph Baumgartner, MSc, MBA
Authorised representative,
management Customer Service Center



 **qualityaustria**

MEMBER OF





Minimum Essential Medium Eagle (MEM)

With Earle's salts, L-Glutamine, 2.2 gms per liter Sodium bicarbonate
Without NEAA

Product Code: AL020A

Product Description:

Minimum Essential Medium (MEM) is a modification of Basal Medium Eagle (BME). It was developed by Harry Eagle to meet the specific nutritional requirements of certain subtypes of HeLa cells and normal mammalian fibroblasts. MEM includes higher concentration of amino acids so as to closely approximate the protein composition of cultured mammalian cells. MEM can be used either with Earle's salts or Hank's salts and can also be additionally supplemented with Non-essential Amino Acids (NEAA). This medium can be further modified by eliminating calcium to facilitate growth of cells in suspension cultures.

AL020A is Minimum Essential Medium Eagle with Earle's salts, L-glutamine and sodium bicarbonate. It does not contain non-essential amino acids. Users are advised to review the literature for recommendations regarding medium supplementation and physiological growth requirements specific for different cell lines.

Composition:

Ingredients	mg/L
INORGANIC SALTS	
Calcium chloride dihydrate	265.000
Magnesium sulphate anhydrous	97.720
Potassium chloride	400.000
Sodium bicarbonate	2200.000
Sodium chloride	6800.000
Sodium dihydrogen phosphate anhydrous	122.000
AMINO ACIDS	
L-Arginine hydrochloride	126.000
L-Cystine dihydrochloride	31.300
L-Glutamine	292.000
L-Histidine hydrochloride monohydrate	42.000
L-Isoleucine	52.000
L-Leucine	52.000
L-Lysine hydrochloride	72.500
L-Methionine	15.000
L-Phenylalanine	32.000

L-Threonine	48.000
L-Tryptophan	10.000
L-Tyrosine disodium salt dihydrate	51.900
L-Valine	46.000
VITAMINS	
Choline chloride	1.000
D-Ca-Pantothenate	1.000
Folic acid	1.000
Nicotinamide	1.000
Pyridoxal hydrochloride	1.000
Riboflavin	0.100
Thiamine hydrochloride	1.000
i-Inositol	2.000
OTHERS	
D-Glucose	1000.000
Phenol red sodium salt	11.000

Quality Control:

Appearance

Orangish red colored, clear solution.

pH

7.00 -7.60

Osmolality in mOsm/Kg H₂O

290.00 -330.00

Sterility

No bacterial or fungal growth is observed after 14 days of incubation, as per USP specification.

Cultural Response

The growth promotion capacity of the medium is assessed qualitatively by analyzing the cells for the morphology and quantitatively by estimating the cell counts.

Endotoxin content

NMT 1EU/ml

Storage and Shelf Life:

Store at 2-8°C away from bright light.

Shelf life is 12 months.

Use before expiry date given on the product label.

Disclaimer :

Revision : 03/2022

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Dulbecco's Modified Eagle Medium (DMEM) High glucose

With 4.5gm Glucose per litre, L-Glutamine, 25mM HEPES buffer, Sodium pyruvate and Sodium bicarbonate

Product Code: AL151A

Product Description:

Dulbecco's Modified Eagle Medium (DMEM) is one of the most widely used modification of Eagle's medium. DMEM is a modification of Basal Medium Eagle (BME) that contains four fold concentration of amino acids and vitamins. Additionally, the formulation also includes glycine, serine and ferric nitrate. The original formulation contains 1000mgs/L of Glucose and was originally used to culture embryonic mouse cells.

DMEM high glucose is a further modification of original DMEM and contains 4500mg/L of glucose. The additional glucose has proved to be useful in cultivating various other cell lines including primary cultures of mouse and chicken cells as well as various normal and transformed cell lines.

AL151A is Dulbecco's Modified Eagle Medium with L-Glutamine, 4.5gms Glucose per litre, 25mM HEPES buffer, Sodium bicarbonate and Sodium pyruvate. HEPES, a zwitterionic buffer having a pKa of 7.3 at 37°C prevents the initial rise in pH that tends to occur at the initiation of a culture and increases the buffering capacity of the medium. Users are advised to review the literature for recommendations regarding medium supplementation and physiological growth requirements specific for different cell lines.

Composition:

Ingredients	mg/L
INORGANIC SALTS	
Calcium chloride dihydrate	265.000
Ferric nitrate nonahydrate	0.100
Magnesium sulphate anhydrous	97.720
Potassium chloride	400.000
Sodium bicarbonate	3700.000
Sodium chloride	4400.000
Sodium phosphate monobasic anhydrous	109.000
AMINO ACIDS	
Glycine	30.000

L-Arginine hydrochloride	84.000
L-Cystine dihydrochloride	62.570
L-Glutamine	584.000
L-Histidine hydrochloride monohydrate	42.000
L-Isoleucine	105.000
L-Leucine	105.000
L-Lysine hydrochloride	146.000
L-Methionine	30.000
L-Phenylalanine	66.000
L-Serine	42.000
L-Threonine	95.000
L-Tryptophan	16.000
L-Tyrosine disodium salt	103.790
L-Valine	94.000
VITAMINS	
Choline chloride	4.000
D-Ca-Pantothenate	4.000
Folic acid	4.000
Nicotinamide	4.000
Pyridoxal hydrochloride	4.000
Riboflavin	0.400
Thiamine hydrochloride	4.000
i-Inositol	7.200
OTHERS	
D-Glucose	4500.000
HEPES buffer	5958.000
Phenol red sodium salt	15.900
Sodium pyruvate	110.000

Quality Control:

Appearance

Orangish red colored, clear solution.

pH

7.00 - 7.60

Osmolality in mOsm/Kg H₂O

280.00 - 320.00

Sterility

No bacterial or fungal growth is observed after 14 days of incubation, as per USP specification.

Cultural Response

The growth promotion capacity of the medium is assessed qualitatively by analyzing the cells for the morphology and quantitatively by estimating the cell counts.

Endotoxin Content

NMT 1EU/ml

Storage and Shelf Life:

Store at 2-8°C away from bright light.

Shelf life is 12 months.

Use before expiry date given on the product label.

Disclaimer :

Revision :06/2025

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Arabinose Ar

DD001

Carbohydrate Differentiation Discs are used to differentiate bacteria on the basis of carbohydrate fermentation abilities.

Directions

Direction for use

A Sugar free medium base is prepared as desired, dispensed and sterilized. Following media are recommended for this test.

Liquid Media

M885 Andrade Peptone Water

MV885 Andrade HiVeg Peptone Water

M909 Andrade Peptone Water with Meat Extract

MV909 Andrade Peptone Water w/ HiVeg Extract No. 1

M054 Phenol Red Broth Base

MV054 Phenol Red HiVeg Broth Base

M279 Phenol Red Broth Base w/ Meat Extract

MV279 Phenol Red Broth Base w/ HiVeg Extract No. 1

M284 Purple Broth Base

MV284 Purple HiVeg Broth Base

M676 Yeast Fermentation Broth

MV676 Yeast Fermentation HiVeg Broth Base

Semisolid Media

M159 Cystine Tryptone Agar

MV159 Cystine Tryptone Agar, HiVeg

M395 OF Basal Medium

MV395 OF Basal HiVeg Medium

M319 Tryptone Agar Base

MV319 Tryptone Agar Base, HiVeg

Solid Media

M053 Phenol Red Agar Base

MV053 Phenol Red HiVeg Agar Base

M098 Purple Agar Base

MV098 Purple HiVeg Agar Base

Any medium-liquid, semisolid or solid can be used as per choice. Liquid and semisolid media are dispensed in 5 ml amounts in test tubes and sterilized. On cooling to 45 - 50°C a single Carbohydrate disc is added to each tube aseptically and inoculated with the test organisms. In semisolid medium the disc is pushed in the medium along with the inoculum just below the surface of the medium, so that the medium at the bottom can serve as control while fermentation can be detected at the surface level. Using solid media it is possible to detect fermentation of number of sugars on the same plate. Sterile plates containing the agar medium of choice are surface seeded with test organism(s) and required Carbohydrate discs are placed and pressed gently on

the surface of the plate at sufficient distance (2 cm) from each other. Incubation is carried out at $36 \pm 1.0^\circ\text{C}$ for 18 - 48 hours and results are recorded at 18 - 24 hours and again at 48 hours. The results should be frequently observed since reversal of fermentation reaction can take place. In case of liquid medium gas produced during fermentation is collected in the inverted Durham's tube while acid produced changes colour of the medium. In semisolid media gas produced is trapped and seen as bubbles. On agar plates fermentation is visualised by change in colour around the disc.

Principle And Interpretation

Ability of an organism to ferment a specific carbohydrate added in the basal medium, results in the production of acid or acid and gas. This ability has been used to characterize a specific species of bacteria which helps in differentiation of species as well (2, 3). When carbohydrate impregnated disc is added to a culture medium the carbohydrate diffuses through the medium. When a carbohydrate is fermented by a microorganism, the acid (or acid and gas) produced lowers the pH of the medium and the indicator in the basal medium thus changes colour (e.g. phenol red changes from red to orange to yellow). Bacteria capable of fermentation grow in Andrade Peptone and produce acid due to fermentation of the added carbohydrate and change the colour of the indicator from light straw colored to pink(1).

Quality Control

Appearance

Filter paper discs of 10 mm diameter bearing letters "Ar" in continuous printing style.

Cultural response

The carbohydrate fermentation reactions after an incubation of 18-48 hours at $35-37^\circ\text{C}$, of various bacteria with Arabinose Differentiation discs were tested using Phenol Red Broth Base (M054).

Cultural Response

Organism	Growth	Acid	Gas
Cultural response <i>Citrobacter freundii</i> ATCC 8090	Luxuriant	Positive reaction: Orangish yellow colour	Positive reaction
<i>Enterobacter aerogenes</i> ATCC 13048	Luxuriant	Positive reaction: Orangish yellow colour	Positive reaction
<i>Escherichia coli</i> ATCC 25922	Luxuriant	Positive reaction: Orangish yellow colour	Positive reaction
<i>Klebsiella pneumoniae</i> ATCC 13883	Luxuriant	Positive reaction: Orangish yellow colour	Positive reaction
<i>Proteus vulgaris</i> ATCC 13315	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Serratia marcescens</i> ATCC 8100	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Salmonella Typhi</i> ATCC 6539	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Salmonella Typhimurium</i> ATCC 14028	Luxuriant	Positive reaction: Orangish yellow colour	Positive reaction
<i>Shigella flexneri</i> ATCC 12022	Luxuriant	Negative reaction: no colour change	Negative reaction

Storage and Shelf Life

Store between 10-30°C. Use before expiry date on the label.

Reference

1. Maxted W. R., 1953, J. Clin. Path., 6:234.
2. Eaton A.D, Clesceri L.S. Greenberg. A.W, 2005, Standard Methods for the Examination of Water and wastewater, 21st edn, APHA. Washington. DC.
3. Mackie and McCartney, 1996, Practical Medical Microbiology, 14th ed., Vol. 2, Collee, Duguid, Fraser and Marmion (Eds.), Churchill Livingstone, Edinburgh.

Revision : 1 / 2011

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Dextrose De

DD002

Carbohydrate Differentiation Discs are used to differentiate bacteria on the basis of carbohydrate fermentation abilities.

Directions

A Sugar free medium base is prepared as desired, dispensed and sterilized. Following media are recommended for this test.

Liquid Media

- M885 Andrade Peptone Water
- MV885 Andrade HiVeg Peptone Water
- M909 Andrade Peptone Water with Meat Extract
- MV909 Andrade Peptone Water w/ HiVeg Extract No. 1
- M054 Phenol Red Broth Base
- MV054 Phenol Red HiVeg Broth Base
- M279 Phenol Red Broth Base w/ Meat Extract
- MV279 Phenol Red Broth Base w/ HiVeg Extract No. 1
- M284 Purple Broth Base
- MV284 Purple HiVeg Broth Base
- M676 Yeast Fermentation Broth
- MV676 Yeast Fermentation HiVeg Broth Base

Semisolid Media

- M159 Cystine Tryptone Agar
- MV159 Cystine Tryptone Agar, HiVeg
- M395 OF Basal Medium
- MV395 OF Basal HiVeg Medium
- M319 Tryptone Agar Base
- MV319 Tryptone Agar Base, HiVeg

Solid Media

- M053 Phenol Red Agar Base
- MV053 Phenol Red HiVeg Agar Base
- M098 Purple Agar Base
- MV098 Purple HiVeg Agar Base

Any medium- liquid, semisolid or solid can be used as per choice. Liquid and semisolid media are dispensed in 5 ml amounts in test tubes and sterilized. On cooling to 45 - 50°C a single Carbohydrate disc is added to each tube aseptically and inoculated with the test organisms. In semisolid medium the disc is pushed in the medium along with the inoculum just below the surface of the medium, so that the medium at the bottom can serve as control while fermentation can be detected at the surface level. Using solid media it is possible to detect fermentation of number of sugars on the same plate. Sterile plates containing the agar medium of choice are surface seeded with test organism(s) and required Carbohydrate discs are placed and pressed gently on the surface of the plate at sufficient distance (2cm) from each other. Incubation is carried out at $36 \pm 1.0^\circ\text{C}$ for 18-48 hours

and results are recorded at 18 - 24 hours and again at 48 hours. The results should be frequently observed since reversal of fermentation reaction can take place. In case of liquid medium gas produced during fermentation is collected in the inverted Durham's tube while acid produced changes colour of the medium. In semisolid media gas produced is trapped and seen as bubbles. On agar plates fermentation is visualised by change in colour around the disc.

Principle And Interpretation

Ability of an organism to ferment a specific carbohydrate added in the basal medium, results in the production of acid or acid and gas. This ability has been used to characterize a specific species of bacteria which helps in differentiation of species as well (2, 3). When carbohydrate impregnated disc is added to a culture medium the carbohydrate diffuses through the medium. When a carbohydrate is fermented by a microorganism, the acid (or acid and gas) produced lowers the pH of the medium and the indicator in the basal medium thus changes colour (e.g. phenol red changes from red to orange to yellow).

Bacteria capable of fermentation grow in Andrade Peptone and produce acid due to fermentation of the added carbohydrate and change the colour of the indicator from light straw colored to pink(1).

Quality Control

Appearance

Filter paper discs of 10 mm diameter bearing letters "De" in continuous printing style.

Cultural response

The carbohydrate fermentation reactions after an incubation of 18-48 hours at 35-37°C, of various bacteria with Dextrose Differentiation discs were tested using Phenol Red Broth Base (M054).

Cultural Response

Organism	Growth	Acid	Gas
Cultural response <i>Citrobacter freundii</i> ATCC 8090	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Enterobacter aerogenes</i> ATCC 13048	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Escherichia coli</i> ATCC 25922	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Klebsiella pneumoniae</i> ATCC 13883	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Proteus vulgaris</i> ATCC 13315	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Serratia marcescens</i> ATCC 8100	Luxuriant	Positive reaction: yellow colour	Negative reaction
<i>Salmonella Typhi</i> ATCC 6539	Luxuriant	Positive reaction: yellow colour	Negative reaction
<i>Salmonella Typhimurium</i> ATCC 14028	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Shigella flexneri</i> ATCC 12022	Luxuriant	Positive reaction: yellow colour	Negative reaction

Storage and Shelf Life

Store between 10-30°C. Use before expiry date on the label.

Reference

1. Maxted W. R., 1953, J. Clin. Path., 6:234.

2. Eaton A.D, Clesceri L.S. Greenberg. A.W, 2005, Standard Methods for the Examination of Water and wastewater, 21st edn, APHA. Washington. DC.
3. Mackie and McCartney, 1996, Practical Medical Microbiology, 14th ed., Vol. 2, Collee, Duguid, Fraser and Marmion (Eds.), Churchill Livingstone, Edinburgh.

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Dulcitol Du

DD003

Carbohydrate Differentiation Discs are used to differentiate bacteria on the basis of carbohydrate fermentation abilities.

Directions

A Sugar free medium base is prepared as desired, dispensed and sterilized. Following media are recommended for this test.

Liquid Media

- M885 Andrade Peptone Water
- MV885 Andrade HiVeg Peptone Water
- M909 Andrade Peptone Water with Meat Extract
- MV909 Andrade Peptone Water w/ HiVeg Extract No. 1
- M054 Phenol Red Broth Base
- MV054 Phenol Red HiVeg Broth Base
- M279 Phenol Red Broth Base w/ Meat Extract
- MV279 Phenol Red Broth Base w/ HiVeg Extract No. 1
- M284 Purple Broth Base
- MV284 Purple HiVeg Broth Base
- M676 Yeast Fermentation Broth
- MV676 Yeast Fermentation HiVeg Broth Base

Semisolid Media

- M159 Cystine Tryptone Agar
- MV159 Cystine Tryptone Agar, HiVeg
- M395 OF Basal Medium
- MV395 OF Basal HiVeg Medium
- M319 Tryptone Agar Base
- MV319 Tryptone Agar Base, HiVeg

Solid Media

- M053 Phenol Red Agar Base
- MV053 Phenol Red HiVeg Agar Base
- M098 Purple Agar Base
- MV098 Purple HiVeg Agar Base

Any medium- liquid, semisolid or solid can be used as per choice. Liquid and semisolid media are dispensed in 5 ml amounts in test tubes and sterilized. On cooling to 45 - 50°C a single Carbohydrate disc is added to each tube aseptically and inoculated with the test organisms. In semisolid medium the disc is pushed in the medium along with the inoculum just below the surface of the medium, so that the medium at the bottom can serve as control while fermentation can be detected at the surface level. Using solid media it is possible to detect fermentation of number of sugars on the same plate. Sterile plates containing the agar medium of choice are surface seeded with test organism(s) and required Carbohydrate discs are placed and pressed gently on the surface of the plate at sufficient distance (2cm) from each other. Incubation is carried out at $36 \pm 1.0^\circ\text{C}$ for 18-48 hours

and results are recorded at 18 - 24 hours and again at 48 hours. The results should be frequently observed since reversal of fermentation reaction can take place. In case of liquid medium gas produced during fermentation is collected in the inverted Durham's tube while acid produced changes colour of the medium. In semisolid media gas produced is trapped and seen as bubbles. On agar plates fermentation is visualized by change in colour around the disc.

Principle And Interpretation

Ability of an organism to ferment a specific carbohydrate added in the basal medium, results in the production of acid or acid and gas. This ability has been used to characterize a specific species of bacteria which helps in differentiation of species as well (2,3). When carbohydrate impregnated disc is added to a culture medium the carbohydrate diffuses through the medium. When a carbohydrate is fermented by a microorganism, the acid (or acid and gas) produced lowers the pH of the medium and the indicator in the basal medium thus changes colour (e.g. phenol red changes from red to orange to yellow).

Bacteria capable of fermentation grow in Andrade Peptone and produce acid due to fermentation of the added carbohydrate and change the colour of the indicator from light straw colored to pink(1).

Quality Control

Appearance

Filter paper discs of 10 mm diameter bearing letters "Du" in continuous printing style.

Cultural response

The carbohydrate fermentation reactions after an incubation of 18-48 hours at 35-37°C, of various bacteria with Dulcitol Differentiation discs were tested using Phenol Red Broth Base (M054).

Organism	Growth	Acid	Gas
Cultural Response			
<i>Citrobacter freundii</i> ATCC 8090	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Enterobacter aerogenes</i> ATCC 13048	Luxuriant	Negative reaction: no colour changer	Negative reaction
<i>Escherichia coli</i> ATCC 25922	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Klebsiella pneumoniae</i> ATCC 13883	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Proteus vulgaris</i> ATCC 13315	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Serratia marcescens</i> ATCC 8100	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Salmonella Typhi</i> ATCC 6539	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Salmonella Typhimurium</i> ATCC 14028	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Shigella flexneri</i> ATCC 12022	Luxuriant	Negative reaction: no colour change	Negative reaction

Storage and Shelf Life

Store between 10-30°C. Use before expiry date on the label.

Reference

1. Maxted W. R., 1953, J. Clin. Path., 6:234.

2. Eaton A.D, Clesceri L.S. Greenberg. A.W, 2005, Standard Methods for the Examination of Water and wastewater, 21st edn, APHA. Washington. DC.
3. Mackie and McCartney, 1996, Practical Medical Microbiology, 14th ed., Vol. 2, Collee, Duguid, Fraser and Marmion (Eds.), Churchill Livingstone, Edinburgh.

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Mannitol Mn

DD006

Carbohydrate Differentiation Discs are used to differentiate bacteria on the basis of carbohydrate fermentation abilities.

Directions

A Sugar free medium base is prepared as desired, dispensed and sterilized. Following media are recommended for this test.

Liquid Media

- M885 Andrade Peptone Water
- MV885 Andrade HiVeg Peptone Water
- M909 Andrade Peptone Water with Meat Extract
- MV909 Andrade Peptone Water w/ HiVeg Extract No. 1
- M054 Phenol Red Broth Base
- MV054 Phenol Red HiVeg Broth Base
- M279 Phenol Red Broth Base w/ Meat Extract
- MV279 Phenol Red Broth Base w/ HiVeg Extract No. 1
- M284 Purple Broth Base
- MV284 Purple HiVeg Broth Base
- M676 Yeast Fermentation Broth
- MV676 Yeast Fermentation HiVeg Broth Base

Semisolid Media

- M159 Cystine Tryptone Agar
- MV159 Cystine Tryptone Agar, HiVeg
- M395 OF Basal Medium
- MV395 OF Basal HiVeg Medium
- M319 Tryptone Agar Base
- MV319 Tryptone Agar Base, HiVeg

Solid Media

- M053 Phenol Red Agar Base
- MV053 Phenol Red HiVeg Agar Base
- M098 Purple Agar Base
- MV098 Purple HiVeg Agar Base

Any medium- liquid, semisolid or solid can be used as per choice. Liquid and semisolid media are dispensed in 5 ml amounts in test tubes and sterilized. On cooling to 45 - 50°C a single Carbohydrate disc is added to each tube aseptically and inoculated with the test organisms. In semisolid medium the disc is pushed in the medium along with the inoculum just below the surface of the medium, so that the medium at the bottom can serve as control while fermentation can be detected at the surface level. Using solid media it is possible to detect fermentation of number of sugars on the same plate. Sterile plates containing the agar medium of choice are surface seeded with test organism(s) and required Carbohydrate discs are placed and pressed gently on the surface of the plate at sufficient distance (2cm) from each other. Incubation is carried out at $36 \pm 1.0^\circ\text{C}$ for 18-48 hours

and results are recorded at 18 - 24 hours and again at 48 hours. The results should be frequently observed since reversal of fermentation reaction can take place. In case of liquid medium gas produced during fermentation is collected in the inverted Durham's tube while acid produced changes colour of the medium. In semisolid media gas produced is trapped and seen as bubbles. On agar plates fermentation is visualised by change in colour around the disc.

Principle And Interpretation

Ability of an organism to ferment a specific carbohydrate added in the basal medium, results in the production of acid or acid and gas. This ability has been used to characterize a specific species of bacteria which helps in differentiation of species as well (2, 3). When carbohydrate impregnated disc is added to a culture medium the carbohydrate diffuses through the medium. When a carbohydrate is fermented by a microorganism, the acid (or acid and gas) produced lowers the pH of the medium and the indicator in the basal medium thus changes colour (e.g. phenol red changes from red to orange to yellow).

Bacteria capable of fermentation grow in Andrade Peptone Water (M885) / Andrade HiVeg Peptone Water (MV885) and produce acid due to fermentation of the added carbohydrate and changes the colour of the indicator from light straw coloured to pink (1).

Quality Control

Appearance

Filter paper discs of 10 mm diameter bearing letters "Mn" in continuous printing style.

Cultural response

The carbohydrate fermentation reactions after an incubation of 18-48 hours at 35-37°C, of various bacteria with Mannitol Differentiation discs were tested using Phenol Red Broth Base (M054).

Cultural Response

Organism	Growth	Acid	Gas
Cultural Response Cultural response <i>Citrobacter freundii</i> ATCC 8090	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Enterobacter aerogenes</i> ATCC 13048	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Escherichia coli</i> ATCC 25922	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Klebsiella pneumoniae</i> ATCC 13883	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Proteus vulgaris</i> ATCC 13315	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Serratia marcescens</i> ATCC 8100	Luxuriant	Positive reaction: yellow colour	Negative reaction
<i>Salmonella Typhi</i> ATCC 6539	Luxuriant	Positive reaction: yellow colour	Negative reaction
<i>Salmonella Typhimurium</i> ATCC 14028	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Shigella flexneri</i> ATCC 12022	Luxuriant	Positive reaction: yellow colour	Negative reaction

Storage and Shelf Life

Store between 10-30°C. Use before expiry date on the label.

Reference

1. Maxted W. R., 1953, J. Clin. Path., 6:234.
2. Eaton A.D, Clesceri L.S. Greenberg. A.W, 2005, Standard Methods for the Examination of Water and wastewater, 21st edn, APHA. Washington. DC.
3. Mackie and McCartney, 1996, Practical Medical Microbiology, 14th ed., Vol. 2, Collee, Duguid, Fraser and Marmion (Eds.), Churchill Livingstone, Edinburgh.

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Mannose

DD007

Carbohydrate Differentiation Discs are used to differentiate bacteria on the basis of carbohydrate fermentation abilities.

Directions

A Sugar free medium base is prepared as desired, dispensed and sterilized. Following media are recommended for this test.

Liquid Media

- M885 Andrade Peptone Water
- MV885 Andrade HiVeg Peptone Water
- M909 Andrade Peptone Water with Meat Extract
- MV909 Andrade Peptone Water w/ HiVeg Extract No. 1
- M054 Phenol Red Broth Base
- MV054 Phenol Red HiVeg Broth Base
- M279 Phenol Red Broth Base w/ Meat Extract
- MV279 Phenol Red Broth Base w/ HiVeg Extract No. 1
- M284 Purple Broth Base
- MV284 Purple HiVeg Broth Base
- M676 Yeast Fermentation Broth
- MV676 Yeast Fermentation HiVeg Broth Base

Semisolid Media

- M159 Cystine Tryptone Agar
- MV159 Cystine Tryptone Agar, HiVeg
- M395 OF Basal Medium
- MV395 OF Basal HiVeg Medium
- M319 Tryptone Agar Base
- MV319 Tryptone Agar Base, HiVeg

Solid Media

- M053 Phenol Red Agar Base
- MV053 Phenol Red HiVeg Agar Base
- M098 Purple Agar Base
- MV098 Purple HiVeg Agar Base

Any medium- liquid, semisolid or solid can be used as per choice. Liquid and semisolid media are dispensed in 5 ml amounts in test tubes and sterilized. On cooling to 45 - 50°C a single Carbohydrate disc is added to each tube aseptically and inoculated with the test organisms. In semisolid medium the disc is pushed in the medium along with the inoculum just below the surface of the medium, so that the medium at the bottom can serve as control while fermentation can be detected at the surface level. Using solid media it is possible to detect fermentation of number of sugars on the same plate. Sterile plates containing the agar medium of choice are surface seeded with test organism(s) and required Carbohydrate discs are placed and pressed gently on the surface of the plate at sufficient distance (2cm) from each other. Incubation is carried out at $36 \pm 1.0^\circ\text{C}$ for 18-48 hours

and results are recorded at 18 - 24 hours and again at 48 hours. The results should be frequently observed since reversal of fermentation reaction can take place. In case of liquid medium gas produced during fermentation is collected in the inverted Durham's tube while acid produced changes colour of the medium. In semisolid media gas produced is trapped and seen as bubbles. On agar plates fermentation is visualized by change in colour around the disc.

Principle And Interpretation

Ability of an organism to ferment a specific carbohydrate added in the basal medium, results in the production of acid or acid and gas. This ability has been used to characterize a specific species of bacteria which helps in differentiation of species as well (2,3). When carbohydrate impregnated disc is added to a culture medium the carbohydrate diffuses through the medium. When a carbohydrate is fermented by a microorganism, the acid (or acid and gas) produced lowers the pH of the medium and the indicator in the basal medium thus changes colour (e.g. phenol red changes from red to orange to yellow).

Bacteria capable of fermentation grow in Andrade Peptone and produce acid due to fermentation of the added carbohydrate and change the colour of the indicator from light straw colored to pink(1).

Quality Control

Appearance

Filter paper discs of 10 mm diameter bearing letters "Mo" in continuous printing style.

Cultural response

The carbohydrate fermentation reactions after an incubation of 18-48 hours at 35-37°C, of various bacteria with Mannose Differentiation discs were tested using Phenol Red Broth Base (M054).

Organism	Growth	Acid	Gas
<i>Citrobacter freundii</i> ATCC 8090	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Enterobacter aerogenes</i> ATCC 13048	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Escherichia coli</i> ATCC 25922	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Klebsiella pneumoniae</i> ATCC 13883	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Proteus vulgaris</i> ATCC 13315	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Serratia marcescens</i> ATCC 8100	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Salmonella Typhi</i> ATCC 6539	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Shigella flexneri</i> ATCC 12022	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Salmonella Typhimurium</i> ATCC 14028	Luxuriant	Negative reaction: no colour change	Negative reaction

Storage and Shelf Life

Store between 10-30°C. Use before expiry date on the label.

Reference

1. Maxted W. R., 1953, J. Clin. Path., 6:234.

2. Eaton A.D, Clesceri L.S. Greenberg. A.W, 2005, Standard Methods for the Examination of Water and wastewater, 21st edn, APHA. Washington. DC.
3. Mackie and McCartney, 1996, Practical Medical Microbiology, 14th ed., Vol. 2, Collee, Duguid, Fraser and Marmion (Eds.), Churchill Livingstone, Edinburgh.

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Optochin Discs

DD009

Intended use

Recommended for identification and differentiation of *Streptococcus pneumoniae* and viridans streptococci.

Directions

Prepare Soyabean Casein Digest Agar (M290) w/blood or Blood Agar Base (M073) w/blood plates and streak pure culture of organism to be tested across one half of the plate. Streak a known *Pneumococcus* (for eg. *Streptococcus pneumoniae*) culture across the other half of the plate as positive control. Immediately place Optochin discs in the centre of the two halves of the plate and incubate at 35-37°C for 18-24 hours in 5% CO₂. Following incubation observe for zone of inhibition around the discs.

Principle And Interpretation

Alpha haemolytic (viridans) streptococci and *Pneumococcus* (*Streptococcus pneumoniae*) cannot be easily distinguished on Blood Agar plates as pneumococci strain shows partial clearing of blood and greenish discolouration (α -haemolysis). Optochin is inhibitory for pneumococcal growth whereas other streptococci strains show good growth or a very small zone of inhibition. Bowers and Jeffries have shown a correlation between bile solubility and full Optochin susceptibility for the differentiation of *Streptococcus pneumoniae* from other streptococci (1). Hence optochin test is a useful diagnostic aid for identification /differentiation of pneumococci and viridans streptococci. Optochin discs are filter paper discs impregnated with optochin. The test is based on the property of viridans streptococci to grow in the presence of Optochin (ethyl hydrocuprein hydrochloride) which inhibits pneumococci. This test is performed for the diagnosis of pneumococcal infections. Specimens of sputum, lung aspirate or urine are first examined by Gram's stain, cultured and the isolates are then subjected to Optochin Sensitivity Test.

Type of specimen

Clinical samples - pure isolate

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (2,3).

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

In Vitro diagnostic use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling clinical specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. Other biochemical and serological tests must be performed for confirmation.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Filter paper discs of 6 mm diameter bearing letters "Op" in continuous printing style

Cultural Response

DD009 : Cultural response observed after an incubation at 35-37°C for 18-24 hours in 5% CO₂ on seeded Soyabean Casein Digest Agar (M290) with added sterile defibrinated blood using Optochin discs.

Organism	Diameter of Zone of Inhibition & Interpretation
<i>Streptococcus pneumoniae</i> ATCC 6303	More than or equal to 15 mm, Sensitive
<i>Streptococcus pyogenes</i> ATCC 19615	No zone of inhibition or a minimal zone, Resistant

Storage and Shelf Life

Store between 2-8°C in a tightly closed container. Use before expiry date on the label. Product performance is best if used within stated expiry period.


Disposal

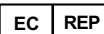
User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (2,3).


Reference

1. Bowers. E.F. and Jeffries L.R., 1995, J. Clin. Path., 8:58.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

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HiMedia Laboratories Pvt.
Limited, Plot No.C-40, Road
No.21Y, MIDC, Wagle Industrial
Area, Thane (W) -400604, MS,
India


CEpartner4U, Esdoornlaan 13,
3951DB Maarn, NL
www.cepartner4u.eu

 **In vitro diagnostic
medical device**

 **CE Marking**

 **Storage temperature**
8°C
2°C

 **Do not use if
package is damaged**

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Rhamnose Rh

DD010

Carbohydrate Differentiation Discs are used to differentiate bacteria on the basis of carbohydrate fermentation abilities.

Directions

A Sugar free medium base is prepared as desired, dispensed and sterilized. Following media are recommended for this test.

Liquid Media

- M885 Andrade Peptone Water
- MV885 Andrade HiVeg Peptone Water
- M909 Andrade Peptone Water with Meat Extract
- MV909 Andrade Peptone Water w/ HiVeg Extract No. 1
- M054 Phenol Red Broth Base
- MV054 Phenol Red HiVeg Broth Base
- M279 Phenol Red Broth Base w/ Meat Extract
- MV279 Phenol Red Broth Base w/ HiVeg Extract No. 1
- M284 Purple Broth Base
- MV284 Purple HiVeg Broth Base
- M676 Yeast Fermentation Broth
- MV676 Yeast Fermentation HiVeg Broth Base

Semisolid Media

- M159 Cystine Tryptone Agar
- MV159 Cystine Tryptone Agar, HiVeg
- M395 OF Basal Medium
- MV395 OF Basal HiVeg Medium
- M319 Tryptone Agar Base
- MV319 Tryptone Agar Base, HiVeg

Solid Media

- M053 Phenol Red Agar Base
- MV053 Phenol Red HiVeg Agar Base
- M098 Purple Agar Base
- MV098 Purple HiVeg Agar Base

Any medium- liquid, semisolid or solid can be used as per choice. Liquid and semisolid media are dispensed in 5 ml amounts in test tubes and sterilized. On cooling to 45 - 50°C a single Carbohydrate disc is added to each tube aseptically and inoculated with the test organisms. In semisolid medium the disc is pushed in the medium along with the inoculum just below the surface of the medium, so that the medium at the bottom can serve as control while fermentation can be detected at the surface level. Using solid media it is possible to detect fermentation of number of sugars on the same plate. Sterile plates containing the agar medium of choice are surface seeded with test organism(s) and required Carbohydrate discs are placed and pressed gently on the surface of the plate at sufficient distance (2cm) from each other. Incubation is carried out at $36 \pm 1.0^\circ\text{C}$ for 18-48 hours

and results are recorded at 18 - 24 hours and again at 48 hours. The results should be frequently observed since reversal of fermentation reaction can take place. In case of liquid medium gas produced during fermentation is collected in the inverted Durham's tube while acid produced changes colour of the medium. In semisolid media gas produced is trapped and seen as bubbles. On agar plates fermentation is visualized by change in colour around the disc.

Principle And Interpretation

Ability of an organism to ferment a specific carbohydrate added in the basal medium, results in the production of acid or acid and gas. This ability has been used to characterize a specific species of bacteria which helps in differentiation of species as well (2,3). When carbohydrate impregnated disc is added to a culture medium the carbohydrate diffuses through the medium. When a carbohydrate is fermented by a microorganism, the acid (or acid and gas) produced lowers the pH of the medium and the indicator in the basal medium thus changes colour (e.g. phenol red changes from red to orange to yellow).

Bacteria capable of fermentation grow in Andrade Peptone and produce acid due to fermentation of the added carbohydrate and change the colour of the indicator from light straw colored to pink(1).

Quality Control

Appearance

Filter paper discs of 10 mm diameter bearing letters "Rh" in continuous printing style.

Cultural response

The carbohydrate fermentation reactions after an incubation of 18-48 hours at 35-37°C, of various bacteria with Rhamnose Differentiation discs were tested using Phenol Red Broth Base (M054).

Cultural Response

Organism	Growth	Acid	Gas
<i>Citrobacter freundii</i> ATCC 8090	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Enterobacter aerogenes</i> ATCC 13048	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Escherichia coli</i> ATCC 25922	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Klebsiella pneumoniae</i> ATCC 13883	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Serratia marcescens</i> ATCC 8100	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Proteus vulgaris</i> ATCC 13315	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Salmonella Typhi</i> ATCC 6539	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Salmonella Typhimurium</i> ATCC 14028	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Shigella flexneri</i> ATCC 12022	Luxuriant	Negative reaction: no colour change	Negative reaction

Storage and Shelf Life

Store between 10-30°C. Use before expiry date on the label.

Reference

1. Maxted W. R., 1953, J. Clin. Path., 6:234.

2. Eaton A.D, Clesceri L.S. Greenberg. A.W, 2005, Standard Methods for the Examination of Water and wastewater, 21st edn, APHA. Washington. DC.
3. Mackie and McCartney, 1996, Practical Medical Microbiology, 14th ed., Vol. 2, Collee, Duguid, Fraser and Marmion (Eds.), Churchill Livingstone, Edinburgh.

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Salicin

DD011

Carbohydrate Differentiation Discs are used to differentiate bacteria on the basis of carbohydrate fermentation abilities.

Directions

A Sugar free medium base is prepared as desired, dispensed and sterilized. Following media are recommended for this test.

Liquid Media

- M885 Andrade Peptone Water
- MV885 Andrade HiVeg Peptone Water
- M909 Andrade Peptone Water with Meat Extract
- MV909 Andrade Peptone Water w/ HiVeg Extract No. 1
- M054 Phenol Red Broth Base
- MV054 Phenol Red HiVeg Broth Base
- M279 Phenol Red Broth Base w/ Meat Extract
- MV279 Phenol Red Broth Base w/ HiVeg Extract No. 1
- M284 Purple Broth Base
- MV284 Purple HiVeg Broth Base
- M676 Yeast Fermentation Broth
- MV676 Yeast Fermentation HiVeg Broth Base

Semisolid Media

- M159 Cystine Tryptone Agar
- MV159 Cystine Tryptone Agar, HiVeg
- M395 OF Basal Medium
- MV395 OF Basal HiVeg Medium
- M319 Tryptone Agar Base
- MV319 Tryptone Agar Base, HiVeg

Solid Media

- M053 Phenol Red Agar Base
- MV053 Phenol Red HiVeg Agar Base
- M098 Purple Agar Base
- MV098 Purple HiVeg Agar Base

Any medium- liquid, semisolid or solid can be used as per choice. Liquid and semisolid media are dispensed in 5 ml amounts in test tubes and sterilized. On cooling to 45 - 50°C a single Carbohydrate disc is added to each tube aseptically and inoculated with the test organisms. In semisolid medium the disc is pushed in the medium along with the inoculum just below the surface of the medium, so that the medium at the bottom can serve as control while fermentation can be detected at the surface level. Using solid media it is possible to detect fermentation of number of sugars on the same plate. Sterile plates containing the agar medium of choice are surface seeded with test organism(s) and required Carbohydrate discs are placed and pressed gently on the surface of the plate at sufficient distance (2cm) from each other. Incubation is carried out at $36 \pm 1.0^\circ\text{C}$ for 18-48 hours

and results are recorded at 18 - 24 hours and again at 48 hours. The results should be frequently observed since reversal of fermentation reaction can take place. In case of liquid medium gas produced during fermentation is collected in the inverted Durham's tube while acid produced changes colour of the medium. In semisolid media gas produced is trapped and seen as bubbles. On agar plates fermentation is visualized by change in colour around the disc.

Principle And Interpretation

Ability of an organism to ferment a specific carbohydrate added in the basal medium, results in the production of acid or acid and gas. This ability has been used to characterize a specific species of bacteria which helps in differentiation of species as well (2,3). When carbohydrate impregnated disc is added to a culture medium the carbohydrate diffuses through the medium. When a carbohydrate is fermented by a microorganism, the acid (or acid and gas) produced lowers the pH of the medium and the indicator in the basal medium thus changes colour (e.g. phenol red changes from red to orange to yellow).

Bacteria capable of fermentation grow in Andrade Peptone and produce acid due to fermentation of the added carbohydrate and change the colour of the indicator from light straw colored to pink(1).

Quality Control

Appearance

Filter paper discs of 10 mm diameter bearing letters "Sa" in continuous printing style.

Cultural response

The carbohydrate fermentation reactions after an incubation of 18-48 hours at 35-37°C, of various bacteria with Salicin Differentiation discs were tested using Phenol Red Broth Base (M054).

Organism	Growth	Acid	Gas
<i>Citrobacter freundii</i> ATCC 8090	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Enterobacter aerogenes</i> ATCC 13048	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Escherichia coli</i> ATCC 25922	Luxuriant	Negative reaction : no colour change	Negative reaction
<i>Klebsiella pneumoniae</i> ATCC 13883	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Proteus vulgaris</i> ATCC 13315	Luxuriant	Positive reaction: yellow colour	Negative reaction
<i>Serratia marcescens</i> ATCC 8100	Luxuriant	Positive reaction: yellow colour	Negative reaction
<i>Salmonella Typhi</i> ATCC 6539	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Salmonella Typhimurium</i> ATCC 14028	Luxuriant	Negative reaction: no colour change	Positive reaction
<i>Shigella flexneri</i> ATCC 12022	Luxuriant	Negative reaction: no colour change	Negative reaction

Storage and Shelf Life

Store between 10-30°C. Use before expiry date on the label.

Reference

1. Maxted W. R., 1953, J. Clin. Path., 6:234.

2. Eaton A.D, Clesceri L.S. Greenberg. A.W, 2005, Standard Methods for the Examination of Water and wastewater, 21st edn, APHA. Washington. DC.
3. Mackie and McCartney, 1996, Practical Medical Microbiology, 14th ed., Vol. 2, Collee, Duguid, Fraser and Marmion (Eds.), Churchill Livingstone, Edinburgh.

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Sorbitol

DD012

Carbohydrate Differentiation Discs are used to differentiate bacteria on the basis of carbohydrate fermentation abilities.

Directions

A Sugar free medium base is prepared as desired, dispensed and sterilized. Following media are recommended for this test.

Liquid Media

- M885 Andrade Peptone Water
- MV885 Andrade HiVeg Peptone Water
- M909 Andrade Peptone Water with Meat Extract
- MV909 Andrade Peptone Water w/ HiVeg Extract No. 1
- M054 Phenol Red Broth Base
- MV054 Phenol Red HiVeg Broth Base
- M279 Phenol Red Broth Base w/ Meat Extract
- MV279 Phenol Red Broth Base w/ HiVeg Extract No. 1
- M284 Purple Broth Base
- MV284 Purple HiVeg Broth Base
- M676 Yeast Fermentation Broth
- MV676 Yeast Fermentation HiVeg Broth Base

Semisolid Media

- M159 Cystine Tryptone Agar
- MV159 Cystine Tryptone Agar, HiVeg
- M395 OF Basal Medium
- MV395 OF Basal HiVeg Medium
- M319 Tryptone Agar Base
- MV319 Tryptone Agar Base, HiVeg

Solid Media

- M053 Phenol Red Agar Base
- MV053 Phenol Red HiVeg Agar Base
- M098 Purple Agar Base
- MV098 Purple HiVeg Agar Base

Any medium- liquid, semisolid or solid can be used as per choice. Liquid and semisolid media are dispensed in 5 ml amounts in test tubes and sterilized. On cooling to 45 - 50°C a single Carbohydrate disc is added to each tube aseptically and inoculated with the test organisms. In semisolid medium the disc is pushed in the medium along with the inoculum just below the surface of the medium, so that the medium at the bottom can serve as control while fermentation can be detected at the surface level. Using solid media it is possible to detect fermentation of number of sugars on the same plate. Sterile plates containing the agar medium of choice are surface seeded with test organism(s) and required Carbohydrate discs are placed and pressed gently on the surface of the plate at sufficient distance (2cm) from each other. Incubation is carried out at $36 \pm 1.0^\circ\text{C}$ for 18-48 hours

and results are recorded at 18 - 24 hours and again at 48 hours. The results should be frequently observed since reversal of fermentation reaction can take place. In case of liquid medium gas produced during fermentation is collected in the inverted Durham's tube while acid produced changes colour of the medium. In semisolid media gas produced is trapped and seen as bubbles. On agar plates fermentation is visualized by change in colour around the disc.

Principle And Interpretation

Ability of an organism to ferment a specific carbohydrate added in the basal medium, results in the production of acid or acid and gas. This ability has been used to characterize a specific species of bacteria which helps in differentiation of species as well (2,3). When carbohydrate impregnated disc is added to a culture medium the carbohydrate diffuses through the medium. When a carbohydrate is fermented by a microorganism, the acid (or acid and gas) produced lowers the pH of the medium and the indicator in the basal medium thus changes colour (e.g. phenol red changes from red to orange to yellow).

Bacteria capable of fermentation grow in Andrade Peptone and produce acid due to fermentation of the added carbohydrate and change the colour of the indicator from light straw colored to pink(1).

Quality Control

Appearance

Filter paper discs of 10 mm diameter bearing letters "Sb" in continuous printing style.

Cultural response

The carbohydrate fermentation reactions after an incubation of 18-48 hours at 35-37°C, of various bacteria with Sorbitol Differentiation discs were tested using Phenol Red Broth Base (M054).

Organism	Growth	Acid	Gas
<i>Citrobacter freundii</i> ATCC 8090	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Enterobacter aerogenes</i> ATCC 13048	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Escherichia coli</i> ATCC 25922	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Klebsiella pneumoniae</i> ATCC 13883	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Serratia marcescens</i> ATCC 8100	Luxuriant	Positive reaction: yellow colour	Negative reaction
<i>Proteus vulgaris</i> ATCC 13315	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Salmonella Typhi</i> ATCC 6539	Luxuriant	Positive reaction: yellow colour	Negative reaction
<i>Salmonella Typhimurium</i> ATCC 14028	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Shigella flexneri</i> ATCC 12022	Luxuriant	Negative reaction: no colour change	Negative reaction

Storage and Shelf Life

Store between 10-30°C. Use before expiry date on the label.

Reference

1. Maxted W. R., 1953, J. Clin. Path., 6:234.

2. Eaton A.D, Clesceri L.S. Greenberg. A.W, 2005, Standard Methods for the Examination of Water and wastewater, 21st edn, APHA. Washington. DC.
3. Mackie and McCartney, 1996, Practical Medical Microbiology, 14th ed., Vol. 2, Collee, Duguid, Fraser and Marmion (Eds.), Churchill Livingstone, Edinburgh.

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Sucrose

DD013

Carbohydrate Differentiation Discs are used to differentiate bacteria on the basis of carbohydrate fermentation abilities.

Directions

A Sugar free medium base is prepared as desired, dispensed and sterilized. Following media are recommended for this test.

Liquid Media

- M885 Andrade Peptone Water
- MV885 Andrade HiVeg Peptone Water
- M909 Andrade Peptone Water with Meat Extract
- MV909 Andrade Peptone Water w/ HiVeg Extract No. 1
- M054 Phenol Red Broth Base
- MV054 Phenol Red HiVeg Broth Base
- M279 Phenol Red Broth Base w/ Meat Extract
- MV279 Phenol Red Broth Base w/ HiVeg Extract No. 1
- M284 Purple Broth Base
- MV284 Purple HiVeg Broth Base
- M676 Yeast Fermentation Broth
- MV676 Yeast Fermentation HiVeg Broth Base

Semisolid Media

- M159 Cystine Tryptone Agar
- MV159 Cystine Tryptone Agar, HiVeg
- M395 OF Basal Medium
- MV395 OF Basal HiVeg Medium
- M319 Tryptone Agar Base
- MV319 Tryptone Agar Base, HiVeg

Solid Media

- M053 Phenol Red Agar Base
- MV053 Phenol Red HiVeg Agar Base
- M098 Purple Agar Base
- MV098 Purple HiVeg Agar Base

Any medium- liquid, semisolid or solid can be used as per choice. Liquid and semisolid media are dispensed in 5 ml amounts in test tubes and sterilized. On cooling to 45 - 50°C a single Carbohydrate disc is added to each tube aseptically and inoculated with the test organisms. In semisolid medium the disc is pushed in the medium along with the inoculum just below the surface of the medium, so that the medium at the bottom can serve as control while fermentation can be detected at the surface level. Using solid media it is possible to detect fermentation of number of sugars on the same plate. Sterile plates containing the agar medium of choice are surface seeded with test organism(s) and required Carbohydrate discs are placed and pressed gently on the surface of the plate at sufficient distance (2cm) from each other. Incubation is carried out at $36 \pm 1.0^\circ\text{C}$ for 18-48 hours

and results are recorded at 18 - 24 hours and again at 48 hours. The results should be frequently observed since reversal of fermentation reaction can take place. In case of liquid medium gas produced during fermentation is collected in the inverted Durham's tube while acid produced changes colour of the medium. In semisolid media gas produced is trapped and seen as bubbles. On agar plates fermentation is visualized by change in colour around the disc.

Principle And Interpretation

Ability of an organism to ferment a specific carbohydrate added in the basal medium, results in the production of acid or acid and gas. This ability has been used to characterize a specific species of bacteria which helps in differentiation of species as well (2,3). When carbohydrate impregnated disc is added to a culture medium the carbohydrate diffuses through the medium. When a carbohydrate is fermented by a microorganism, the acid (or acid and gas) produced lowers the pH of the medium and the indicator in the basal medium thus changes colour (e.g. phenol red changes from red to orange to yellow).

Bacteria capable of fermentation grow in Andrade Peptone and produce acid due to fermentation of the added carbohydrate and change the colour of the indicator from light straw colored to pink(1).

Quality Control

Appearance

Filter paper discs of 10 mm diameter bearing letters "Su" in continuous printing style.

Cultural response

The carbohydrate fermentation reactions after an incubation of 18-48 hours at 35-37°C, of various bacteria with Sucrose Differentiation discs were tested using Phenol Red Broth Base (M054).

Organism	Growth	Acid	Gas
<i>Citrobacter freundii</i> ATCC 8090	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Enterobacter aerogenes</i> ATCC 13048	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Escherichia coli</i> ATCC 25922	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Klebsiella pneumoniae</i> ATCC 13883	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Proteus vulgaris</i> ATCC 13315	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Serratia marcescens</i> ATCC 8100	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Salmonella Typhi</i> ATCC 6539	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Salmonella Typhimurium</i> ATCC 14028	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Shigella flexneri</i> ATCC 12022	Luxuriant	Negative reaction: no colour change	Negative reaction

Storage and Shelf Life

Store between 10-30°C. Use before expiry date on the label.

Reference

1. Maxted W. R., 1953, J. Clin. Path., 6:234.

2. Eaton A.D, Clesceri L.S. Greenberg. A.W, 2005, Standard Methods for the Examination of Water and wastewater, 21st edn, APHA. Washington. DC.
3. Mackie and McCartney, 1996, Practical Medical Microbiology, 14th ed., Vol. 2, Collee, Duguid, Fraser and Marmion (Eds.), Churchill Livingstone, Edinburgh.

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Xylose

DD014

Carbohydrate Differentiation Discs are used to differentiate bacteria on the basis of carbohydrate fermentation abilities.

Directions

A Sugar free medium base is prepared as desired, dispensed and sterilized. Following media are recommended for this test.

Liquid Media

- M885 Andrade Peptone Water
- MV885 Andrade HiVeg Peptone Water
- M909 Andrade Peptone Water with Meat Extract
- MV909 Andrade Peptone Water w/ HiVeg Extract No. 1
- M054 Phenol Red Broth Base
- MV054 Phenol Red HiVeg Broth Base
- M279 Phenol Red Broth Base w/ Meat Extract
- MV279 Phenol Red Broth Base w/ HiVeg Extract No. 1
- M284 Purple Broth Base
- MV284 Purple HiVeg Broth Base
- M676 Yeast Fermentation Broth
- MV676 Yeast Fermentation HiVeg Broth Base

Semisolid Media

- M159 Cystine Tryptone Agar
- MV159 Cystine Tryptone Agar, HiVeg
- M395 OF Basal Medium
- MV395 OF Basal HiVeg Medium
- M319 Tryptone Agar Base
- MV319 Tryptone Agar Base, HiVeg

Solid Media

- M053 Phenol Red Agar Base
- MV053 Phenol Red HiVeg Agar Base
- M098 Purple Agar Base
- MV098 Purple HiVeg Agar Base

Any medium- liquid, semisolid or solid can be used as per choice. Liquid and semisolid media are dispensed in 5 ml amounts in test tubes and sterilized. On cooling to 45 - 50°C a single Carbohydrate disc is added to each tube aseptically and inoculated with the test organisms. In semisolid medium the disc is pushed in the medium along with the inoculum just below the surface of the medium, so that the medium at the bottom can serve as control while fermentation can be detected at the surface level. Using solid media it is possible to detect fermentation of number of sugars on the same plate. Sterile plates containing the agar medium of choice are surface seeded with test organism(s) and required Carbohydrate discs are placed and pressed gently on the surface of the plate at sufficient distance (2cm) from each other. Incubation is carried out at $36 \pm 1.0^\circ\text{C}$ for 18-48 hours

and results are recorded at 18 - 24 hours and again at 48 hours. The results should be frequently observed since reversal of fermentation reaction can take place. In case of liquid medium gas produced during fermentation is collected in the inverted Durham's tube while acid produced changes colour of the medium. In semisolid media gas produced is trapped and seen as bubbles. On agar plates fermentation is visualized by change in colour around the disc.

Principle And Interpretation

Ability of an organism to ferment a specific carbohydrate added in the basal medium, results in the production of acid or acid and gas. This ability has been used to characterize a specific species of bacteria which helps in differentiation of species as well (2,3). When carbohydrate impregnated disc is added to a culture medium the carbohydrate diffuses through the medium. When a carbohydrate is fermented by a microorganism, the acid (or acid and gas) produced lowers the pH of the medium and the indicator in the basal medium thus changes colour (e.g. phenol red changes from red to orange to yellow).

Bacteria capable of fermentation grow in Andrade Peptone and produce acid due to fermentation of the added carbohydrate and change the colour of the indicator from light straw colored to pink(1).

Quality Control

Appearance

Filter paper discs of 10 mm diameter bearing letters "Xy" in continuous printing style.

Cultural response

The carbohydrate fermentation reactions after an incubation of 18-48 hours at 35-37°C, of various bacteria with Xylose Differentiation discs were tested using Phenol Red Broth Base (M054).

Organism	Growth	Acid	Gas
<i>Citrobacter freundii</i> ATCC 8090	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Enterobacter aerogenes</i> ATCC 13048	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Escherichia coli</i> ATCC 25922	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Klebsiella pneumoniae</i> ATCC 13883	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Proteus vulgaris</i> ATCC 13315	Luxuriant	Positive reaction: yellow colour	Negative reaction
<i>Serratia marcescens</i> ATCC 8100	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Salmonella Typhi</i> ATCC 6539	Luxuriant	Positive reaction: yellow colour	Negative reaction
<i>Salmonella Typhimurium</i> ATCC 14028	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Shigella flexneri</i> ATCC 12022	Luxuriant	Negative reaction: no colour change	Negative reaction

Storage and Shelf Life

Store between 10-30°C. Use before expiry date on the label.

Reference

1. Moxley W. R., 1953, J. Clin. Path., 6:234.

2. Eaton A.D, Clesceri L.S. Greenberg. A.W, 2005, Standard Methods for the Examination of Water and wastewater, 21st edn, APHA. Washington. DC.
3. Mackie and McCartney, 1996, Practical Medical Microbiology, 14th ed., Vol. 2, Collee, Duguid, Fraser and Marmion (Eds.), Churchill Livingstone, Edinburgh.

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Bacitracin (50 discs/vl)

DD015

Intended Use

Recommended for the identification and differentiation of Group A streptococci (especially *Streptococcus pyogenes*) from other β -haemolytic streptococci.

Directions

Pure Cultures : Evenly inoculate the surface of Tryptose Blood Agar Base (M097) with pure culture of β -haemolytic streptococci to be tested. Aseptically place a Bacitracin disc on the inoculated surface and incubate the inverted plate at 35-37°C for 18-24 hours in 10% CO₂. Observe for the presence of zone of inhibition around the Bacitracin disc. A zone indicates that the Streptococcus is presumptively of Group A. If desired further confirmation can be obtained by serological grouping.

Clinical Materials : Inoculate Tryptose Blood Agar Base (M097) plate with throat swab or other material. Spread the inoculum to obtain discrete colonies on some portion of the plate, so as to determine the species in mixed growth. Aseptically place a Bacitracin disc on the secondary area of inoculation and incubate the inverted plates for 18-24 hours at 35-37°C in 10% CO₂. Examine for zones of inhibition. Bacitracin is inhibitory to many organisms except β -haemolytic streptococci, however the presence of a zone of inhibition does not essentially indicate Lancefield Group A streptococci. If the colonial morphology is carefully observed, it is possible to select presumptive Group A streptococci. By serological grouping, further confirmation can be obtained.

Principle And Interpretation

The growth of Group A β -haemolytic streptococci on blood agar is inhibited by 0.04 units Bacitracin disc. Micrococci and streptococci are also inhibited by 0.04 units disc, while all coagulase-negative staphylococci are resistant (1). Bacitracin susceptibility test discs are filter paper discs impregnated with 0.04 units of Bacitracin. Bacitracin discs can save considerable time, labour and materials if used as a screening test before serological grouping. Maxted showed that Group A streptococci were more sensitive to Bacitracin than β -haemolytic strains of other groups (2). Hence he suggested that Bacitracin might be used as a rapid diagnostic agent for Group A streptococci. Levinson and Frank (3) who employed Bacitracin impregnated filter paper discs for this purpose, observed that many sensitive β -haemolytic streptococci were of Group A. Steamer et al compared Bacitracin disc, fluorescent antibody technique and Lancefield precipitin technique and found that the Bacitracin disc technique was most convenient for routine clinical laboratory (4). Bacitracin sensitivity test along with Furacin and Optochin tests are useful for distinguishing *Aerococcus viridans* and *S. milleri* from enterococci and *Streptococcus mitis* (3).

Type of specimen

Isolated Microorganism

Specimen Collection and Handling

For microbial specimens, follow appropriate techniques for handling specimens as per established guidelines (5,6). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. Use known Group A and non-Group A streptococci to determine the accuracy of the discs and inoculum.
2. Serological grouping is required for further confirmation of Group A streptococci .

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Filter paper discs of 6 mm diameter bearing letters "B" in continuous printing style.

Cultural response

Average diameter of zone of inhibition for *S.pyogenes* observed on Tryptose Blood Agar (M097) after an incubation at 35-37°C for 18-24 hours.

Organism	Zone of inhibition (mm)
<i>Streptococcus pyogenes</i> ATCC 19615	15 -20 mm

Key : (*) Corresponding WDCM numbers.

Storage and Shelf Life

Store at 2 - 8°C. Use before expiry date on the label. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (5,6).

Reference

1. Guthof O.,1960, Ztschr. F hyg. U. Infektionskr.,146:425.
2. Maxted W. R., 1953, J. Clin. Path., 6:234.
3. Levinson M. L. and Frank P.F., 1955, J. Bact., 69:234.
4. Streamer C.W et al, 1962, Am. J. Dis. Children, 104:157.
5. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
6. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

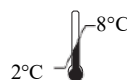
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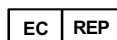
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Galactose

DD016

Carbohydrate Differentiation Discs are used to differentiate bacteria on the basis of carbohydrate fermentation abilities.

Directions

A Sugar free medium base is prepared as desired, dispensed and sterilized. Following media are recommended for this test.

Liquid Media

- M885 Andrade Peptone Water
- MV885 Andrade HiVeg Peptone Water
- M909 Andrade Peptone Water with Meat Extract
- MV909 Andrade Peptone Water w/ HiVeg Extract No. 1
- M054 Phenol Red Broth Base
- MV054 Phenol Red HiVeg Broth Base
- M279 Phenol Red Broth Base w/ Meat Extract
- MV279 Phenol Red Broth Base w/ HiVeg Extract No. 1
- M284 Purple Broth Base
- MV284 Purple HiVeg Broth Base
- M676 Yeast Fermentation Broth
- MV676 Yeast Fermentation HiVeg Broth Base

Semisolid Media

- M159 Cystine Tryptone Agar
- MV159 Cystine Tryptone Agar, HiVeg
- M395 OF Basal Medium
- MV395 OF Basal HiVeg Medium
- M319 Tryptone Agar Base
- MV319 Tryptone Agar Base, HiVeg

Solid Media

- M053 Phenol Red Agar Base
- MV053 Phenol Red HiVeg Agar Base
- M098 Purple Agar Base
- MV098 Purple HiVeg Agar Base

Any medium- liquid, semisolid or solid can be used as per choice. Liquid and semisolid media are dispensed in 5 ml amounts in test tubes and sterilized. On cooling to 45 - 50°C a single Carbohydrate disc is added to each tube aseptically and inoculated with the test organisms. In semisolid medium the disc is pushed in the medium along with the inoculum just below the surface of the medium, so that the medium at the bottom can serve as control while fermentation can be detected at the surface level. Using solid media it is possible to detect fermentation of number of sugars on the same plate. Sterile plates containing the agar medium of choice are surface seeded with test organism(s) and required Carbohydrate discs are placed and pressed gently on the surface of the plate at sufficient distance (2cm) from each other. Incubation is carried out at $36 \pm 1.0^\circ\text{C}$ for 18-48 hours

and results are recorded at 18 - 24 hours and again at 48 hours. The results should be frequently observed since reversal of fermentation reaction can take place. In case of liquid medium gas produced during fermentation is collected in the inverted Durham's tube while acid produced changes colour of the medium. In semisolid media gas produced is trapped and seen as bubbles. On agar plates fermentation is visualized by change in colour around the disc.

Principle And Interpretation

Ability of an organism to ferment a specific carbohydrate added in the basal medium, results in the production of acid or acid and gas. This ability has been used to characterize a specific species of bacteria which helps in differentiation of species as well (2,3). When carbohydrate impregnated disc is added to a culture medium the carbohydrate diffuses through the medium. When a carbohydrate is fermented by a microorganism, the acid (or acid and gas) produced lowers the pH of the medium and the indicator in the basal medium thus changes colour (e.g. phenol red changes from red to orange to yellow).

Bacteria capable of fermentation grow in Andrade Peptone and produce acid due to fermentation of the added carbohydrate and change the colour of the indicator from light straw colored to pink(1).

Quality Control

Appearance

Filter paper discs of 10 mm diameter bearing letters "Ga" in continuous printing style.

Cultural response

The carbohydrate fermentation reactions after an incubation of 18-48 hours at 35-37°C, of various bacteria with Galactose Differentiation discs were tested using Phenol Red Broth Base (M054).

Organism	Growth	Acid	Gas
<i>Citrobacter freundii</i> ATCC 8090	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Enterobacter aerogenes</i> ATCC 13048	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Escherichia coli</i> ATCC 25922	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Klebsiella pneumoniae</i> ATCC 13883	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Proteus vulgaris</i> ATCC 13315	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Serratia marcescens</i> ATCC 8100	Luxuriant	Positive reaction: yellow colour	Negative reaction
<i>Salmonella Typhi</i> ATCC 6539	Luxuriant	Positive reaction: yellow colour	Negative reaction
<i>Salmonella Typhimurium</i> ATCC 14028	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Shigella flexneri</i> ATCC 12022	Luxuriant	Positive reaction: yellow colour	Negative reaction

Storage and Shelf Life

Store between 10-30°C. Use before expiry date on the label.

Reference

1. Mated W. R., 1953, J. Clin. Path., 6:234.

2. Eaton A.D, Clesceri L.S. Greenberg. A.W, 2005, Standard Methods for the Examination of Water and wastewater, 21st edn, APHA. Washington. DC.
3. Mackie and McCartney, 1996, Practical Medical Microbiology, 14th ed., Vol. 2, Collee, Duguid, Fraser and Marmion (Eds.), Churchill Livingstone, Edinburgh.

Revision : 1 / 2011

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Oxidase Discs

DD018

Intended Use

Recommended for detection of oxidase production by microorganisms like *Neisseria*, *Alcaligenes*, *Aeromonas*, *Vibrio*, *Campylobacter* and *Pseudomonas* which give positive reactions and for excluding *Enterobacteriaceae*, which give negative reactions.

Directions

Oxidase reaction is carried out by touching and spreading a well isolated colony on the oxidase disc. The reaction is observed within 5-10 seconds at 25-30°C. A change later than 10 seconds or no change at all is considered negative reaction.

Principle And Interpretation

Certain bacteria possess either cytochrome oxidase or indophenol oxidase (an iron-containing haemoprotein), which catalyzes the transport of electrons from donor compounds (NADH) to electron acceptors (usually oxygen). In the oxidase test, a colourless dye such as N, N-dimethyl-p-phenylenediamine serves as an artificial electron acceptor for the enzyme oxidase (1). The dye is oxidized to form indophenol blue, a coloured compound. The test is useful in the initial characterization of aerobic gram-negative bacteria of the genera *Aeromonas*, *Plesiomonas*, *Pseudomonas*, *Campylobacter* and *Pasteurella*. Oxidase discs are sterile filter paper discs impregnated with N, N-dimethyl-p-phenylenediamine oxalate, ascorbic acid and a-naphthol. These discs overcome the necessity of daily preparation of fresh reagent. Gordon and McLeod (2) introduced oxidase test for identifying gonococci based upon the ability of certain bacteria to produce indophenol blue from the oxidation of dimethyl-p-phenylenediamine and a-naphthol. Gaby and Hadley (3) introduced a more sensitive method by using N,N-dimethyl-p-phenylenediamine oxalate where all staphylococci were oxidase negative. In a positive reaction the enzyme cytochrome oxidase combines with N,N-dimethyl-p-phenylenediamine oxalate and a-naphthol to form the dye, indophenol blue.

Type of specimen

Isolated Microorganism

Specimen Collection and Handling

For microbial specimens, follow appropriate techniques for handling specimens as per established guidelines (4,5). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. Do not use stainless steel or nichrome inoculating wires, as false positive reaction may result from surface oxidation products formed during flame sterilization.
2. Growth from media containing dyes is not suitable for testing.
3. Timing is critical (5-10 sec) for interpretation of results.
4. Perform oxidase test on all gram-negative bacilli.
5. Cytochrome oxidase production may be inhibited by acid production. False negative reactions may be exhibited by *Vibrio*, *Aeromonas* and *Plesiomonas* species when grown on a medium containing fermentable carbohydrate e.g. MacConkey Agar (M081). Colonies taken from media containing nitrate may give unreliable results. The loss of activity of the oxidase reagent is caused by auto-oxidation which may be avoided by adding 0.1% ascorbic acid (6).

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Filter paper discs of 10 mm diameter

Cultural response

Typical oxidase reaction given by 18-48 hour culture observed within 5-10 seconds at 25-30°C.

Organism	Reaction Observed
<i>Pseudomonas aeruginosa</i> ATCC 27853 (00025*)	positive : deep purplish blue colouration of disc
<i>Neisseria gonorrhoeae</i> ATCC 19424	positive : deep purplish blue colouration of disc
<i>Escherichia coli</i> ATCC 25922 (00013*)	negative : purplish blue colouration after 10 sec/ no colour change
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC 25923 (00034*)	negative : no colour change

Key : (*) Corresponding WDCM numbers.

Storage and Shelf Life

Store at 2 - 8°C. Use before expiry date on the label. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (4,5).

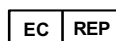
Reference

- Biochemical tests for Identification of Medical Bacteria, 3rd Edition, Jean F. MacFaddin.
- Gordon J. and Mcleod J.W., 1928, J. Path. Bact., 31:185
- Gaby W.L and Hadley C., 1957. J. Bact., 74:356
- Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
- Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

Revision : 01/ 2022



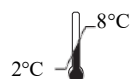
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Kovac's Reagent Strip

DD019

Kovac's Reagent Strips are used to detect indole producing bacteria.

Directions

Indole production by organisms is observed by inserting the Kovac's reagent strip between the plug and inner wall of the tube, above the inoculated Peptone Water (M028) and incubating at 35-37°C for 18-24 hours.

Preparation of Kovac's reagent

Kovac's reagent is prepared by dissolving 10 gm of p-dimethyl aminobenzaldehyde in 150 ml of isoamyl alcohol and then slowly adding 50 ml of concentrated hydrochloric acid.

Principle And Interpretation

The various enzymes involved in the degradation of tryptophan to indole are collectively called as tryptophanase, a general term used to denote the complete system of enzymes (2). The presence of indole is detected by the Kovac's reagent strip which turns pink in the presence of indole.

Kovac's Reagent Strips are sterile filter paper strips impregnated with Kovac's reagent. Peptone is used in the preparation of Peptone Water because of its high tryptophan content. When tryptophan is degraded by bacteria, indole is produced. Tryptone Water (M463) can also be used to detect indole production in the identification of members of coliform group (1).

Quality Control

Appearance

Filter paper strips of 70 mm x 5 mm.

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours by inserting Kovac's Reagent Strips between the plug and inner wall of tube, above the inoculated Peptone Water (M028).

Organism	Growth	Indole
<i>Escherichia coli</i> ATCC 25922	luxuriant	positive reaction, pink colour at the lower portion of the strip.
<i>Enterobacter aerogenes</i> ATCC 13048	luxuriant	negative reaction, no colour change.

Storage and Shelf Life

Store at 2 - 8°C. Use before expiry date on the label.

Reference

- Eaton A.D, Clesceri L.S., Greenberg. A.E, Rice E. W.(Eds) 2005, Standard Methods for the Examination of Water and wastewater, 21st ed., APHA, Washington DC.
- MacFaddin J. F., 2000, Biochemical Tests for Identification of Medical Bacteria, 3rd ed., Philadelphia: Lippincott. Williams and Wilkins.

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X Factor

DD020

Intended Use

Recommended for the presumptive identification of *Haemophilus* species on the basis of their requirements for X or V factors or both.

Directions

Inoculate the surface of BHI Agar (M211) plate with the test organisms by either streaking or surface spreading. Aseptically place the X (DD020), V (DD021) and X+V (DD022) factor discs on the plate, in the following positions:
Disc Position on the Agar plate

X factor disc 12 O' clock

V factor disc 4 O' clock

X+V factor disc 8 O' clock

Incubate the plates at 35 - 37°C for 24 - 48 hours. Observe for the growth in the neighborhood of the discs.

Principle And Interpretation

Both X and V factors are growth factors that are essential for certain organisms like *Haemophilus* species and also enhance growth of organisms like *Neisseria* species. X-factor discs are the sterile filter paper discs impregnated with growth factor X which are used for differentiating *Haemophilus* species in conjunction of V factor & X+V factor discs. *Bordetella* and *Haemophilus* species can also be identified on the basis of the requirement of X and V growth factors in the basal medium. The X factor (hemin) and V factor (Coenzyme- Nicotinamide adenine dinucleotide NAD+) are impregnated on the sterile filter paper discs diameter 6mm. The test organism requiring X factor alone, grows only in the vicinities of X and X+V factor discs. Those which require V factor alone grow in the vicinities of V and X+V factor discs. If both X and V factors are required, then the organism will grow only in the vicinity of the X+V factor discs. This satellite growth is seen around the disc promoting growth (1).

Type of specimen

Isolated Microorganism

Specimen Collection and Handling

For microbial specimens, follow appropriate techniques for handling specimens as per established guidelines (2,3). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. Further biochemical or serological testing is recommended to identify the organism accurately.
2. Also some species of *Haemophilus* shows similarities in growth factor requirements.
3. Do not use too heavy suspension of the test organisms as X or V factor carryover medium from the primary growth may take place.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Dark Brown to grayish colour Filter paper discs of 6 mm diameter bearing letters "X" in continuous printing style.

Cultural response

Cultural characteristics observed on BHI Agar (M211) after an incubation at 35-37°C for 24-48 hours.

Organism	Growth with X factor	Growth without growth factor
<i>Haemophilus parainfluenzae</i> ATCC 7901	Negative	Negative
<i>Haemophilus influenzae</i> ATCC 19418	Positive	Negative
<i>Haemophilus influenzae</i> ATCC 49247	Positive	Negative
<i>Haemophilus influenzae</i> ATCC 49766	Positive	Negative
<i>Haemophilus influenzae</i> ATCC 10211	Positive	Negative

Storage and Shelf Life

Store at 2°C to 8°C. Use before expiry date on the label. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (2,3).

Reference

1. Murray PR, Baron EJ, Jorgensen J.H., Pfaller M A, Tenover F.C., Tenover F.C. (Eds.), 8th ed, 2003, Manual of Clinical Microbiology, ASM, Washington D.C.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

Revision : 05/ 2026



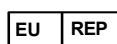
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V Factor

DD021

Intended Use

Recommended for the presumptive identification of *Haemophilus* species on the basis of their requirements for X or V factors or both.

Directions

Inoculate the surface of BHI Agar (M211) plate with the test organisms by either streaking or surface spreading. Aseptically place the X (DD020), V (DD021) and X+V (DD022) factor discs on the plate, in the following positions:

Disc Position on the Agar plate:

X factor disc 12 O' clock

V factor disc 4 O' clock

X+V factor disc 8 O' clock

Incubate the plates at 35 - 37°C for 24 - 48 hours. Observe for the growth in the neighbourhood of the discs.

Principle And Interpretation

Both X and V factors are growth factors that are essential for certain organisms like *Haemophilus* species and also enhance growth of organisms like *Neisseria* species. V-factor discs are the sterile filter paper discs impregnated with growth factor V which are used for differentiating *Haemophilus* species in conjunction of X factor & X+V factor discs. *Bordetella* and *Haemophilus* species can also be identified on the basis of the requirement of X and V growth factors in the basal medium. The X factor (hemin) and V factor (Coenzyme- Nicotinamide adenine dinucleotide NAD⁺) are impregnated on the sterile filter paper discs of diameter 6mm. The test organism requiring X factor alone, grows only in the vicinities of X and X+V factor discs. Those which require V factor alone grow in the vicinities of V and X+V factor discs. If both X and V factors are required, then the organism will grow only in the vicinity of the X+V factor discs. This satellite growth is seen around the disc promoting growth (1).

Type of specimen

Isolated Microorganism

Specimen Collection and Handling

For microbial specimens, follow appropriate techniques for handling specimens as per established guidelines (2,3). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. Further biochemical or serological testing is recommended to identify the organism accurately.
2. Also some species of *Haemophilus* shows similarities in growth factor requirements.
3. Do not use too heavy suspension of the test organisms as X or V factor carryover from the primary growth medium may take place.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Filter paper discs of 6 mm diameter bearing letters "V" in continuous printing style.

Cultural response

Cultural characteristics observed on BHI Agar (M211) after an incubation at 35-37°C for 24-48 hours.

Organism	Growth with V factor	Growth without growth factor
<i>Haemophilus parainfluenzae</i> ATCC 7901	Positive	Negative
<i>Haemophilus influenzae</i> ATCC 19418	Negative	Negative
<i>Haemophilus influenzae</i> ATCC 49247	Negative	Negative
<i>Haemophilus influenzae</i> ATCC 49766	Negative	Negative
<i>Haemophilus influenzae</i> ATCC 10211	Negative	Negative

Storage and Shelf Life

Store below (-20°C to -10°C). Use before expiry date on the label. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (2,3).

Reference

1. Murray PR, Baron EJ, Jorgensen J.H., Pfaller M A, Tenover F.C., Tenover F.C. (Eds.), 8th ed, 2003, Manual of Clinical Microbiology, ASM, Washington D.C.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

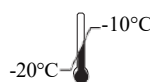
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X+V Factor

DD022

Intended Use

Recommended for the presumptive identification of *Haemophilus* species on the basis of their requirements for X or V factors or both.

Directions

Inoculate the surface of BHI Agar (M211) plate with the test organisms by either streaking or surface spreading. Aseptically place the X (DD020), V (DD021) and X+V (DD022) factor discs on the plate, in the following positions:
Disc Position on the Agar plate

X factor disc 12 O' clock

V factor disc 4 O' clock

X+V factor disc 8 O' clock

Incubate the plates at 35 - 37°C for 24 - 48 hours. Observe for the growth in the neighbourhood of the discs.

Principle And Interpretation

Both X and V factors are growth factors that are essential for certain organisms like *Haemophilus* species and also enhance growth of organisms like *Neisseria* species. X+V factor discs are the sterile filter paper discs impregnated with growth factor X and V which are used for differentiating *Haemophilus* species in conjunction of X factor & V factor discs. *Bordetella* and *Haemophilus* species can also be identified on the basis of the requirement of X and V growth factors in the basal medium. The X factor (hemin) and V factor (Coenzyme- Nicotinamide adenine dinucleotide NAD⁺) are impregnated on the sterile filter paper discs of diameter 6mm. The test organism requiring X factor alone, grows only in the vicinities of X and X+V factor discs. Those which require V factor alone grow in the vicinities of V and X+V factor discs. If both X and V factors are required, then the organism will grow only in the vicinity of the X+V factor discs. This satellite growth is seen around the disc promoting growth (1).

Type of specimen

Isolated Microorganism

Specimen Collection and Handling

For microbial specimens, follow appropriate techniques for handling specimens as per established guidelines (2,3). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. Further biochemical or serological testing is recommended to identify the organism accurately.
2. Also some species of *Haemophilus* shows similarities in growth factor requirements.
3. Do not use too heavy suspension of the test organisms as X or V factor carryover from the primary growth medium may take place.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Dark Brown to Grayish colour Filter paper discs of 6 mm diameter bearing letters "X+V" in continuous printing style.

Cultural response

Cultural characteristics observed on BHI Agar (M211) after an incubation at 35-37°C for 24-48 hours.

Organism	Growth with X +V factor	Growth without growth factor
<i>Haemophilus parainfluenzae</i> ATCC 7901	Positive	Negative
<i>Haemophilus influenzae</i> ATCC 19418	Positive	Negative
<i>Haemophilus influenzae</i> ATCC 49247	Positive	Negative
<i>Haemophilus influenzae</i> ATCC 49766	Positive	Negative
<i>Haemophilus influenzae</i> ATCC 10211	Positive	Negative

Storage and Shelf Life

Store below (-20°C to -10°C). Use before expiry date on the label. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (2,3).

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- Murray PR, Baron EJ, Jorgensen J.H., Pfaller M A, Tenover F.C., Tenover F.C. (Eds.), 8th ed, 2003, Manual of Clinical Microbiology, ASM, Washington D.C.
- Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
- Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

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Bile Esculin Discs

DD024

Intended Use

Recommended for detection of esculin hydrolysis in the presence of bile, for differentiating Group D streptococci from other Streptococcal groups.

Directions

Esculin impregnated disc is placed on the seeded Bile Esculin Agar Base (M340) plate and is incubated at 35-37°C for 18-24 hours.

Principle And Interpretation

Group D streptococci hydrolyze esculin to esculetin and dextrose. Esculetin reacts with an iron salt such as ferric citrate to form a blackish brown coloured complex (1). Rochaix found that esculin hydrolysis is an important criteria in the identification of enterococci (2). Meyer and Schonfeld (3) observed that when bile was added to esculin medium, around 60% enterococci were able to grow and split the esculin while other streptococci could not. When a comparative study was performed by Facklam and Moody (4) for presumptive identification of Group D streptococci, they found the bile esculin test as a reliable means of identifying Group D streptococci and differentiating them from other streptococci groups.

Type of specimen

Isolated Microorganism

Specimen Collection and Handling

For microbial specimens, follow appropriate techniques for handling specimens as per established guidelines (5,6). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. Use known Group D and non-Group D streptococci to determine the accuracy of the discs and inoculum.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Plain filter paper discs of 6mm diameter.

Cultural response

Cultural response observed by placing Bile Esculin disc (DD024) on seeded Bile Esculin Agar Base (M340) plate, incubated at 35-37°C for 18-24 hours.

Organism	Growth	Esculin hydrolysis
<i>Enterococcus faecalis</i> ATCC 29212 (00087*)	luxuriant	positive: blackening of media around the disc.
<i>Streptococcus agalactiae</i> ATCC 13813	luxuriant	negative: no blackening

<i>Listeria monocytogenes</i> ATCC 19118	luxuriant	positive: blackening of media around the disc.
<i>Streptococcus pyogenes</i> ATCC 19615	luxuriant	negative: no blackening

Key : (*) Corresponding WDCM numbers.

Storage and Shelf Life

Store at 2 - 8°C. Use before expiry date on the label. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (5,6).

Reference

1. MacFaddin J. F., 2000, Biochemical Tests for Identification of Medical Bacteria, 3rd ed., Philadelphia: Lippincott. Williams and Wilkins.
2. Rochaix, 1924, C. R. Soc. Biol., 90:771.
3. Meyer and Schonfeld, 1926, Zentralbl. Bacteriol. Parasitenkd. Infektionskr. Hyg. Abt. I Orig., 99:402.
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5. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
6. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

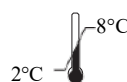
Revision : 02/2023



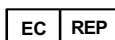
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Adonitol

DD025

Carbohydrate Differentiation Discs are used to differentiate bacteria on the basis of carbohydrate fermentation abilities.

Directions

A Sugar free medium base is prepared as desired, dispensed and sterilized. Following media are recommended for this test.

Liquid Media

- M885 Andrade Peptone Water
- MV885 Andrade HiVeg Peptone Water
- M909 Andrade Peptone Water with Meat Extract
- MV909 Andrade Peptone Water w/ HiVeg Extract No. 1
- M054 Phenol Red Broth Base
- MV054 Phenol Red HiVeg Broth Base
- M279 Phenol Red Broth Base w/ Meat Extract
- MV279 Phenol Red Broth Base w/ HiVeg Extract No. 1
- M284 Purple Broth Base
- MV284 Purple HiVeg Broth Base
- M676 Yeast Fermentation Broth
- MV676 Yeast Fermentation HiVeg Broth Base

Semisolid Media

- M159 Cystine Tryptone Agar
- MV159 Cystine Tryptone Agar, HiVeg
- M395 OF Basal Medium
- MV395 OF Basal HiVeg Medium
- M319 Tryptone Agar Base
- MV319 Tryptone Agar Base, HiVeg

Solid Media

- M053 Phenol Red Agar Base
- MV053 Phenol Red HiVeg Agar Base
- M098 Purple Agar Base
- MV098 Purple HiVeg Agar Base

Any medium- liquid, semisolid or solid can be used as per choice. Liquid and semisolid media are dispensed in 5 ml amounts in test tubes and sterilized. On cooling to 45 - 50°C a single Carbohydrate disc is added to each tube aseptically and inoculated with the test organisms. In semisolid medium the disc is pushed in the medium along with the inoculum just below the surface of the medium, so that the medium at the bottom can serve as control while fermentation can be detected at the surface level. Using solid media it is possible to detect fermentation of number of sugars on the same plate. Sterile plates containing the agar medium of choice are surface seeded with test organism(s) and required Carbohydrate discs are placed and pressed gently on the surface of the plate at sufficient distance (2cm) from each other. Incubation is carried out at $36 \pm 1.0^\circ\text{C}$ for 18-48 hours

and results are recorded at 18 - 24 hours and again at 48 hours. The results should be frequently observed since reversal of fermentation reaction can take place. In case of liquid medium gas produced during fermentation is collected in the inverted Durham's tube while acid produced changes colour of the medium. In semisolid media gas produced is trapped and seen as bubbles. On agar plates fermentation is visualized by change in colour around the disc.

Principle And Interpretation

Ability of an organism to ferment a specific carbohydrate added in the basal medium, results in the production of acid or acid and gas. This ability has been used to characterize a specific species of bacteria which helps in differentiation of species as well (2,3). When carbohydrate impregnated disc is added to a culture medium the carbohydrate diffuses through the medium. When a carbohydrate is fermented by a microorganism, the acid (or acid and gas) produced lowers the pH of the medium and the indicator in the basal medium thus changes colour (e.g. phenol red changes from red to orange to yellow).

Bacteria capable of fermentation grow in Andrade Peptone and produce acid due to fermentation of the added carbohydrate and change the colour of the indicator from light straw colored to pink(1).

Quality Control

Appearance

Filter paper discs of 10 mm diameter bearing letters "Ad" in continuous printing style.

Cultural response

The carbohydrate fermentation reactions after an incubation of 18-48 hours at 35-37°C, of various bacteria with Adonitol Differentiation discs were tested using Phenol Red Broth Base (M054).

Organism	Growth	Acid.	Gas.
<i>Citrobacter freundii</i> ATCC 8090	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Enterobacter aerogenes</i> ATCC 13048	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Escherichia coli</i> ATCC 25922	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Klebsiella pneumoniae</i> ATCC 13883	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Proteus vulgaris</i> ATCC 13315	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Serratia marcescens</i> ATCC 8100	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Salmonella Typhi</i> ATCC 6539	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Salmonella Typhimurium</i> ATCC 14028	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Shigella flexneri</i> ATCC 12022	Luxuriant	Negative reaction: no colour change	Negative reaction

Storage and Shelf Life

Store between 10-30°C. Use before expiry date on the label.

Reference

1. Maxted W. R., 1953, J. Clin. Path., 6:234.

2. Eaton A.D, Clesceri L.S. Greenberg. A.W, 2005, Standard Methods for the Examination of Water and wastewater, 21st edn, APHA. Washington. DC.
3. Mackie and McCartney, 1996, Practical Medical Microbiology, 14th ed., Vol. 2, Collee, Duguid, Fraser and Marmion (Eds.), Churchill Livingstone, Edinburgh.

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Adonitol

DD025

Carbohydrate Differentiation Discs are used to differentiate bacteria on the basis of carbohydrate fermentation abilities.

Directions

A Sugar free medium base is prepared as desired, dispensed and sterilized. Following media are recommended for this test.

Liquid Media

- M885 Andrade Peptone Water
- MV885 Andrade HiVeg Peptone Water
- M909 Andrade Peptone Water with Meat Extract
- MV909 Andrade Peptone Water w/ HiVeg Extract No. 1
- M054 Phenol Red Broth Base
- MV054 Phenol Red HiVeg Broth Base
- M279 Phenol Red Broth Base w/ Meat Extract
- MV279 Phenol Red Broth Base w/ HiVeg Extract No. 1
- M284 Purple Broth Base
- MV284 Purple HiVeg Broth Base
- M676 Yeast Fermentation Broth
- MV676 Yeast Fermentation HiVeg Broth Base

Semisolid Media

- M159 Cystine Tryptone Agar
- MV159 Cystine Tryptone Agar, HiVeg
- M395 OF Basal Medium
- MV395 OF Basal HiVeg Medium
- M319 Tryptone Agar Base
- MV319 Tryptone Agar Base, HiVeg

Solid Media

- M053 Phenol Red Agar Base
- MV053 Phenol Red HiVeg Agar Base
- M098 Purple Agar Base
- MV098 Purple HiVeg Agar Base

Any medium- liquid, semisolid or solid can be used as per choice. Liquid and semisolid media are dispensed in 5 ml amounts in test tubes and sterilized. On cooling to 45 - 50°C a single Carbohydrate disc is added to each tube aseptically and inoculated with the test organisms. In semisolid medium the disc is pushed in the medium along with the inoculum just below the surface of the medium, so that the medium at the bottom can serve as control while fermentation can be detected at the surface level. Using solid media it is possible to detect fermentation of number of sugars on the same plate. Sterile plates containing the agar medium of choice are surface seeded with test organism(s) and required Carbohydrate discs are placed and pressed gently on the surface of the plate at sufficient distance (2cm) from each other. Incubation is carried out at $36 \pm 1.0^\circ\text{C}$ for 18-48 hours

and results are recorded at 18 - 24 hours and again at 48 hours. The results should be frequently observed since reversal of fermentation reaction can take place. In case of liquid medium gas produced during fermentation is collected in the inverted Durham's tube while acid produced changes colour of the medium. In semisolid media gas produced is trapped and seen as bubbles. On agar plates fermentation is visualized by change in colour around the disc.

Principle And Interpretation

Ability of an organism to ferment a specific carbohydrate added in the basal medium, results in the production of acid or acid and gas. This ability has been used to characterize a specific species of bacteria which helps in differentiation of species as well (2,3). When carbohydrate impregnated disc is added to a culture medium the carbohydrate diffuses through the medium. When a carbohydrate is fermented by a microorganism, the acid (or acid and gas) produced lowers the pH of the medium and the indicator in the basal medium thus changes colour (e.g. phenol red changes from red to orange to yellow).

Bacteria capable of fermentation grow in Andrade Peptone and produce acid due to fermentation of the added carbohydrate and change the colour of the indicator from light straw colored to pink(1).

Quality Control

Appearance

Filter paper discs of 10 mm diameter bearing letters "Ad" in continuous printing style.

Cultural response

The carbohydrate fermentation reactions after an incubation of 18-48 hours at 35-37°C, of various bacteria with Adonitol Differentiation discs were tested using Phenol Red Broth Base (M054).

Organism	Growth	Acid.	Gas.
<i>Citrobacter freundii</i> ATCC 8090	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Enterobacter aerogenes</i> ATCC 13048	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Escherichia coli</i> ATCC 25922	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Klebsiella pneumoniae</i> ATCC 13883	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Proteus vulgaris</i> ATCC 13315	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Serratia marcescens</i> ATCC 8100	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Salmonella Typhi</i> ATCC 6539	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Salmonella Typhimurium</i> ATCC 14028	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Shigella flexneri</i> ATCC 12022	Luxuriant	Negative reaction: no colour change	Negative reaction

Storage and Shelf Life

Store between 10-30°C. Use before expiry date on the label.

Reference

1. Maxted W. R., 1953, J. Clin. Path., 6:234.

2. Eaton A.D, Clesceri L.S. Greenberg. A.W, 2005, Standard Methods for the Examination of Water and wastewater, 21st edn, APHA. Washington. DC.
3. Mackie and McCartney, 1996, Practical Medical Microbiology, 14th ed., Vol. 2, Collee, Duguid, Fraser and Marmion (Eds.), Churchill Livingstone, Edinburgh.

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Inulin

DD026

Carbohydrate Differentiation Discs are used to differentiate bacteria on the basis of carbohydrate fermentation abilities.

Directions

A Sugar free medium base is prepared as desired, dispensed and sterilized. Following media are recommended for this test.

Liquid Media

- M885 Andrade Peptone Water
- MV885 Andrade HiVeg Peptone Water
- M909 Andrade Peptone Water with Meat Extract
- MV909 Andrade Peptone Water w/ HiVeg Extract No. 1
- M054 Phenol Red Broth Base
- MV054 Phenol Red HiVeg Broth Base
- M279 Phenol Red Broth Base w/ Meat Extract
- MV279 Phenol Red Broth Base w/ HiVeg Extract No. 1
- M284 Purple Broth Base
- MV284 Purple HiVeg Broth Base
- M676 Yeast Fermentation Broth
- MV676 Yeast Fermentation HiVeg Broth Base

Semisolid Media

- M159 Cystine Tryptone Agar
- MV159 Cystine Tryptone Agar, HiVeg
- M395 OF Basal Medium
- MV395 OF Basal HiVeg Medium
- M319 Tryptone Agar Base
- MV319 Tryptone Agar Base, HiVeg

Solid Media

- M053 Phenol Red Agar Base
- MV053 Phenol Red HiVeg Agar Base
- M098 Purple Agar Base
- MV098 Purple HiVeg Agar Base

Any medium- liquid, semisolid or solid can be used as per choice. Liquid and semisolid media are dispensed in 5 ml amounts in test tubes and sterilized. On cooling to 45 - 50°C a single Carbohydrate disc is added to each tube aseptically and inoculated with the test organisms. In semisolid medium the disc is pushed in the medium along with the inoculum just below the surface of the medium, so that the medium at the bottom can serve as control while fermentation can be detected at the surface level. Using solid media it is possible to detect fermentation of number of sugars on the same plate. Sterile plates containing the agar medium of choice are surface seeded with test organism(s) and required Carbohydrate discs are placed and pressed gently on the surface of the plate at sufficient distance (2cm) from each other. Incubation is carried out at $36 \pm 1.0^\circ\text{C}$ for 18-48 hours

and results are recorded at 18 - 24 hours and again at 48 hours. The results should be frequently observed since reversal of fermentation reaction can take place. In case of liquid medium gas produced during fermentation is collected in the inverted Durham's tube while acid produced changes colour of the medium. In semisolid media gas produced is trapped and seen as bubbles. On agar plates fermentation is visualized by change in colour around the disc.

Principle And Interpretation

Ability of an organism to ferment a specific carbohydrate added in the basal medium, results in the production of acid or acid and gas. This ability has been used to characterize a specific species of bacteria which helps in differentiation of species as well (2,3). When carbohydrate impregnated disc is added to a culture medium the carbohydrate diffuses through the medium. When a carbohydrate is fermented by a microorganism, the acid (or acid and gas) produced lowers the pH of the medium and the indicator in the basal medium thus changes colour (e.g. phenol red changes from red to orange to yellow).

Bacteria capable of fermentation grow in Andrade Peptone and produce acid due to fermentation of the added carbohydrate and change the colour of the indicator from light straw colored to pink(1).

Quality Control

Appearance

Filter paper discs of 10 mm diameter bearing letters "In" in continuous printing style.

Cultural response

The carbohydrate fermentation reactions after an incubation of 18-48 hours at 35-37°C, of various bacteria with Inulin Differentiation discs were tested using Phenol Red Broth Base (M054).

Organism	Growth	Acid	Gas
<i>Streptococcus pneumoniae</i> ATCC 6303	Luxuriant	Positive reaction: yellow colour	Negative reaction
<i>Streptococcus pyogenes</i> ATCC 19615	Luxuriant	Negative reaction, no colour change	Negative reaction

Storage and Shelf Life

Store between 10-30°C. Use before expiry date on the label.

Reference

1. Maxted W. R., 1953, J. Clin. Path., 6:234.
2. Eaton A.D, Clesceri L.S. Greenberg. A.W, 2005, Standard Methods for the Examination of Water and wastewater, 21st edn, APHA. Washington. DC.
3. Mackie and McCartney, 1996, Practical Medical Microbiology, 14th ed., Vol. 2, Collee, Duguid, Fraser and Marmion (Eds.), Churchill Livingstone, Edinburgh.

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Inositol Is

DD027

Carbohydrate Differentiation Discs are used to differentiate bacteria on the basis of carbohydrate fermentation abilities.

Directions

A Sugar free medium base is prepared as desired, dispensed and sterilized. Following media are recommended for this test.

Liquid Media

- M885 Andrade Peptone Water
- MV885 Andrade HiVeg Peptone Water
- M909 Andrade Peptone Water with Meat Extract
- MV909 Andrade Peptone Water w/ HiVeg Extract No. 1
- M054 Phenol Red Broth Base
- MV054 Phenol Red HiVeg Broth Base
- M279 Phenol Red Broth Base w/ Meat Extract
- MV279 Phenol Red Broth Base w/ HiVeg Extract No. 1
- M284 Purple Broth Base
- MV284 Purple HiVeg Broth Base
- M676 Yeast Fermentation Broth
- MV676 Yeast Fermentation HiVeg Broth Base

Semisolid Media

- M159 Cystine Tryptone Agar
- MV159 Cystine Tryptone Agar, HiVeg
- M395 OF Basal Medium
- MV395 OF Basal HiVeg Medium
- M319 Tryptone Agar Base
- MV319 Tryptone Agar Base, HiVeg

Solid Media

- M053 Phenol Red Agar Base
- MV053 Phenol Red HiVeg Agar Base
- M098 Purple Agar Base
- MV098 Purple HiVeg Agar Base

Any medium- liquid, semisolid or solid can be used as per choice. Liquid and semisolid media are dispensed in 5 ml amounts in test tubes and sterilized. On cooling to 45 - 50°C a single Carbohydrate disc is added to each tube aseptically and inoculated with the test organisms. In semisolid medium the disc is pushed in the medium along with the inoculum just below the surface of the medium, so that the medium at the bottom can serve as control while fermentation can be detected at the surface level. Using solid media it is possible to detect fermentation of number of sugars on the same plate. Sterile plates containing the agar medium of choice are surface seeded with test organism(s) and required Carbohydrate discs are placed and pressed gently on the surface of the plate at sufficient distance (2cm) from each other. Incubation is carried out at $36 \pm 1.0^\circ\text{C}$ for 18-48 hours

and results are recorded at 18 - 24 hours and again at 48 hours. The results should be frequently observed since reversal of fermentation reaction can take place. In case of liquid medium gas produced during fermentation is collected in the inverted Durham's tube while acid produced changes colour of the medium. In semisolid media gas produced is trapped and seen as bubbles. On agar plates fermentation is visualized by change in colour around the disc.

Principle And Interpretation

Ability of an organism to ferment a specific carbohydrate added in the basal medium, results in the production of acid or acid and gas. This ability has been used to characterize a specific species of bacteria which helps in differentiation of species as well (2,3). When carbohydrate impregnated disc is added to a culture medium the carbohydrate diffuses through the medium. When a carbohydrate is fermented by a microorganism, the acid (or acid and gas) produced lowers the pH of the medium and the indicator in the basal medium thus changes colour (e.g. phenol red changes from red to orange to yellow).

Bacteria capable of fermentation grow in Andrade Peptone and produce acid due to fermentation of the added carbohydrate and change the colour of the indicator from light straw colored to pink(1).

Quality Control

Appearance

Filter paper discs of 10 mm diameter bearing letters "Is" in continuous printing style.

Cultural response

The carbohydrate fermentation reactions after an incubation of 18-48 hours at 35-37°C, of various bacteria with Inositol Differentiation discs were tested using Phenol Red Broth Base (M054).

Cultural Response

Organism	Growth	Acid	Gas
Cultural response <i>Citrobacter freundii</i> ATCC 8090	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Enterobacter aerogenes</i> ATCC 13048	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Escherichia coli</i> ATCC 25922	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Klebsiella pneumoniae</i> ATCC 13883	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Proteus vulgaris</i> ATCC 13315	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Serratia marcescens</i> ATCC 8100	Luxuriant	Positive reaction: Yellow colour	Negative reaction
<i>Salmonella Typhi</i> ATCC 6539	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Salmonella Typhimurium</i> ATCC 14028	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Shigella flexneri</i> ATCC 12022	Luxuriant	Negative reaction: no colour change	Negative reaction

Storage and Shelf Life

Store between 10-30°C. Use before expiry date on the label.

Reference

1. Maxted W. R., 1953, J. Clin. Path., 6:234.

2. Eaton A.D, Clesceri L.S. Greenberg. A.W, 2005, Standard Methods for the Examination of Water and wastewater, 21st edn, APHA. Washington. DC.
3. Mackie and McCartney, 1996, Practical Medical Microbiology, 14th ed., Vol. 2, Collee, Duguid, Fraser and Marmion (Eds.), Churchill Livingstone, Edinburgh.

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Cellobiose

DD028

Carbohydrate Differentiation Discs are used to differentiate bacteria on the basis of carbohydrate fermentation abilities.

Directions

A Sugar free medium base is prepared as desired, dispensed and sterilized. Following media are recommended for this test.

Liquid Media

- M885 Andrade Peptone Water
- MV885 Andrade HiVeg Peptone Water
- M909 Andrade Peptone Water with Meat Extract
- MV909 Andrade Peptone Water w/ HiVeg Extract No. 1
- M054 Phenol Red Broth Base
- MV054 Phenol Red HiVeg Broth Base
- M279 Phenol Red Broth Base w/ Meat Extract
- MV279 Phenol Red Broth Base w/ HiVeg Extract No. 1
- M284 Purple Broth Base
- MV284 Purple HiVeg Broth Base
- M676 Yeast Fermentation Broth
- MV676 Yeast Fermentation HiVeg Broth Base

Semisolid Media

- M159 Cystine Tryptone Agar
- MV159 Cystine Tryptone Agar, HiVeg
- M395 OF Basal Medium
- MV395 OF Basal HiVeg Medium
- M319 Tryptone Agar Base
- MV319 Tryptone Agar Base, HiVeg

Solid Media

- M053 Phenol Red Agar Base
- MV053 Phenol Red HiVeg Agar Base
- M098 Purple Agar Base
- MV098 Purple HiVeg Agar Base

Any medium- liquid, semisolid or solid can be used as per choice. Liquid and semisolid media are dispensed in 5 ml amounts in test tubes and sterilized. On cooling to 45 - 50°C a single Carbohydrate disc is added to each tube aseptically and inoculated with the test organisms. In semisolid medium the disc is pushed in the medium along with the inoculum just below the surface of the medium, so that the medium at the bottom can serve as control while fermentation can be detected at the surface level. Using solid media it is possible to detect fermentation of number of sugars on the same plate. Sterile plates containing the agar medium of choice are surface seeded with test organism(s) and required Carbohydrate discs are placed and pressed gently on the surface of the plate at sufficient distance (2cm) from each other. Incubation is carried out at $36 \pm 1.0^\circ\text{C}$ for 18-48 hours

and results are recorded at 18 - 24 hours and again at 48 hours. The results should be frequently observed since reversal of fermentation reaction can take place. In case of liquid medium gas produced during fermentation is collected in the inverted Durham's tube while acid produced changes colour of the medium. In semisolid media gas produced is trapped and seen as bubbles. On agar plates fermentation is visualized by change in colour around the disc.

Principle And Interpretation

Ability of an organism to ferment a specific carbohydrate added in the basal medium, results in the production of acid or acid and gas. This ability has been used to characterize a specific species of bacteria which helps in differentiation of species as well (2,3). When carbohydrate impregnated disc is added to a culture medium the carbohydrate diffuses through the medium. When a carbohydrate is fermented by a microorganism, the acid (or acid and gas) produced lowers the pH of the medium and the indicator in the basal medium thus changes colour (e.g. phenol red changes from red to orange to yellow).

Bacteria capable of fermentation grow in Andrade Peptone and produce acid due to fermentation of the added carbohydrate and change the colour of the indicator from light straw colored to pink(1).

Quality Control

Appearance

Filter paper discs of 10 mm diameter bearing letters "Ce" in continuous printing style.

Cultural response

The carbohydrate fermentation reactions after an incubation of 18-48 hours at 35-37°C, of various bacteria with Cellobiose Differentiation discs were tested using Phenol Red Broth Base (M054).

Organism	Growth	Acid	Gas
<i>Citrobacter freundii</i> ATCC 8090	Luxuriant	Positive reaction: yellow colour	Negative reaction
<i>Enterobacter aerogenes</i> ATCC 13048	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Escherichia coli</i> ATCC 25922	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Klebsiella pneumoniae</i> ATCC 13883	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Proteus vulgaris</i> ATCC 13315	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Serratia marcescens</i> ATCC 8100	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Salmonella Typhi</i> ATCC 6539	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Salmonella Typhimurium</i> ATCC 14028	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Shigella flexneri</i> ATCC 12022	Luxuriant	Negative reaction: no colour change	Negative reaction

Storage and Shelf Life

Store between 10-30°C. Use before expiry date on the label.

Reference

1. Maxted W. R., 1953, J. Clin. Path., 6:234.

2. Eaton A.D, Clesceri L.S. Greenberg. A.W, 2005, Standard Methods for the Examination of Water and wastewater, 21st edn, APHA. Washington. DC.
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Raffinose

DD029

Carbohydrate Differentiation Discs are used to differentiate bacteria on the basis of carbohydrate fermentation abilities.

Directions

A Sugar free medium base is prepared as desired, dispensed and sterilized. Following media are recommended for this test.

Liquid Media

- M885 Andrade Peptone Water
- MV885 Andrade HiVeg Peptone Water
- M909 Andrade Peptone Water with Meat Extract
- MV909 Andrade Peptone Water w/ HiVeg Extract No. 1
- M054 Phenol Red Broth Base
- MV054 Phenol Red HiVeg Broth Base
- M279 Phenol Red Broth Base w/ Meat Extract
- MV279 Phenol Red Broth Base w/ HiVeg Extract No. 1
- M284 Purple Broth Base
- MV284 Purple HiVeg Broth Base
- M676 Yeast Fermentation Broth
- MV676 Yeast Fermentation HiVeg Broth Base

Semisolid Media

- M159 Cystine Tryptone Agar
- MV159 Cystine Tryptone Agar, HiVeg
- M395 OF Basal Medium
- MV395 OF Basal HiVeg Medium
- M319 Tryptone Agar Base
- MV319 Tryptone Agar Base, HiVeg

Solid Media

- M053 Phenol Red Agar Base
- MV053 Phenol Red HiVeg Agar Base
- M098 Purple Agar Base
- MV098 Purple HiVeg Agar Base

Any medium- liquid, semisolid or solid can be used as per choice. Liquid and semisolid media are dispensed in 5 ml amounts in test tubes and sterilized. On cooling to 45 - 50°C a single Carbohydrate disc is added to each tube aseptically and inoculated with the test organisms. In semisolid medium the disc is pushed in the medium along with the inoculum just below the surface of the medium, so that the medium at the bottom can serve as control while fermentation can be detected at the surface level. Using solid media it is possible to detect fermentation of number of sugars on the same plate. Sterile plates containing the agar medium of choice are surface seeded with test organism(s) and required Carbohydrate discs are placed and pressed gently on the surface of the plate at sufficient distance (2cm) from each other. Incubation is carried out at $36 \pm 1.0^\circ\text{C}$ for 18-48 hours

and results are recorded at 18 - 24 hours and again at 48 hours. The results should be frequently observed since reversal of fermentation reaction can take place. In case of liquid medium gas produced during fermentation is collected in the inverted Durham's tube while acid produced changes colour of the medium. In semisolid media gas produced is trapped and seen as bubbles. On agar plates fermentation is visualized by change in colour around the disc.

Principle And Interpretation

Ability of an organism to ferment a specific carbohydrate added in the basal medium, results in the production of acid or acid and gas. This ability has been used to characterize a specific species of bacteria which helps in differentiation of species as well (2,3). When carbohydrate impregnated disc is added to a culture medium the carbohydrate diffuses through the medium. When a carbohydrate is fermented by a microorganism, the acid (or acid and gas) produced lowers the pH of the medium and the indicator in the basal medium thus changes colour (e.g. phenol red changes from red to orange to yellow).

Bacteria capable of fermentation grow in Andrade Peptone and produce acid due to fermentation of the added carbohydrate and change the colour of the indicator from light straw colored to pink(1).

Quality Control

Appearance

Filter paper discs of 10 mm diameter bearing letters "Rf" in continuous printing style.

Cultural response

The carbohydrate fermentation reactions after an incubation of 18-48 hours at 35-37°C, of various bacteria with Raffinose Differentiation discs were tested using Phenol Red Broth Base (M054).

Organism	Growth	Acid	Gas
<i>Citrobacter freundii</i> ATCC 8090	Luxuriant	Negative reaction: no colour change	Positive reaction
<i>Enterobacter aerogenes</i> ATCC 13048	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Escherichia coli</i> ATCC 25922	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Klebsiella pneumoniae</i> ATCC 13883	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Serratia marcescens</i> ATCC 8100	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Proteus vulgaris</i> ATCC 13315	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Salmonella Typhi</i> ATCC 6539	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Salmonella Typhimurium</i> ATCC 14028	Luxuriant	Negative reaction: no colour change	Negative reaction
<i>Shigella flexneri</i> ATCC 12022	Luxuriant	Negative reaction: no colour change	Negative reaction

Storage and Shelf Life

Store between 10-30°C. Use before expiry date on the label.

Reference

1. Maxted W. R., 1953, J. Clin. Path., 6:234.

2. Eaton A.D, Clesceri L.S. Greenberg. A.W, 2005, Standard Methods for the Examination of Water and wastewater, 21st edn, APHA. Washington. DC.
3. Mackie and McCartney, 1996, Practical Medical Microbiology, 14th ed., Vol. 2, Collee, Duguid, Fraser and Marmion (Eds.), Churchill Livingstone, Edinburgh.

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Trehalose

DD031

Carbohydrate Differentiation Discs are used to differentiate bacteria on the basis of carbohydrate fermentation abilities.

Directions

A Sugar free medium base is prepared as desired, dispensed and sterilized. Following media are recommended for this test.

Liquid Media

- M885 Andrade Peptone Water
- MV885 Andrade HiVeg Peptone Water
- M909 Andrade Peptone Water with Meat Extract
- MV909 Andrade Peptone Water w/ HiVeg Extract No. 1
- M054 Phenol Red Broth Base
- MV054 Phenol Red HiVeg Broth Base
- M279 Phenol Red Broth Base w/ Meat Extract
- MV279 Phenol Red Broth Base w/ HiVeg Extract No. 1
- M284 Purple Broth Base
- MV284 Purple HiVeg Broth Base
- M676 Yeast Fermentation Broth
- MV676 Yeast Fermentation HiVeg Broth Base

Semisolid Media

- M159 Cystine Tryptone Agar
- MV159 Cystine Tryptone Agar, HiVeg
- M395 OF Basal Medium
- MV395 OF Basal HiVeg Medium
- M319 Tryptone Agar Base
- MV319 Tryptone Agar Base, HiVeg

Solid Media

- M053 Phenol Red Agar Base
- MV053 Phenol Red HiVeg Agar Base
- M098 Purple Agar Base
- MV098 Purple HiVeg Agar Base

Any medium- liquid, semisolid or solid can be used as per choice. Liquid and semisolid media are dispensed in 5 ml amounts in test tubes and sterilized. On cooling to 45 - 50°C a single Carbohydrate disc is added to each tube aseptically and inoculated with the test organisms. In semisolid medium the disc is pushed in the medium along with the inoculum just below the surface of the medium, so that the medium at the bottom can serve as control while fermentation can be detected at the surface level. Using solid media it is possible to detect fermentation of number of sugars on the same plate. Sterile plates containing the agar medium of choice are surface seeded with test organism(s) and required Carbohydrate discs are placed and pressed gently on the surface of the plate at sufficient distance (2cm) from each other. Incubation is carried out at $36 \pm 1.0^\circ\text{C}$ for 18-48 hours

and results are recorded at 18 - 24 hours and again at 48 hours. The results should be frequently observed since reversal of fermentation reaction can take place. In case of liquid medium gas produced during fermentation is collected in the inverted Durham's tube while acid produced changes colour of the medium. In semisolid media gas produced is trapped and seen as bubbles. On agar plates fermentation is visualized by change in colour around the disc.

Principle And Interpretation

Ability of an organism to ferment a specific carbohydrate added in the basal medium, results in the production of acid or acid and gas. This ability has been used to characterize a specific species of bacteria which helps in differentiation of species as well (2,3). When carbohydrate impregnated disc is added to a culture medium the carbohydrate diffuses through the medium. When a carbohydrate is fermented by a microorganism, the acid (or acid and gas) produced lowers the pH of the medium and the indicator in the basal medium thus changes colour (e.g. phenol red changes from red to orange to yellow).

Bacteria capable of fermentation grow in Andrade Peptone and produce acid due to fermentation of the added carbohydrate and change the colour of the indicator from light straw colored to pink(1).

Quality Control

Appearance

Filter paper discs of 10 mm diameter bearing letters "Te" in continuous printing style.

Cultural response

The carbohydrate fermentation reactions after an incubation of 18-48 hours at 35-37°C, of various bacteria with Trehalose Differentiation discs were tested using Phenol Red Broth Base (M054).

Organism	Growth	Acid	Gas
<i>Citrobacter freundii</i> ATCC 8090	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Enterobacter aerogenes</i> ATCC 13048	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Escherichia coli</i> ATCC 25922	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Klebsiella pneumoniae</i> ATCC 13883	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Proteus vulgaris</i> ATCC 13315	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Serratia marcescens</i> ATCC 8100	Luxuriant	Positive reaction: Yellow colour	Negative reaction
<i>Salmonella Typhi</i> ATCC 6539	Luxuriant	Positive reaction: yellow colour	Negative reaction
<i>Salmonella Typhimurium</i> ATCC 14028	Luxuriant	Positive reaction: yellow colour	Positive reaction
<i>Shigella flexneri</i> ATCC 12022	Luxuriant	Positive reaction: yellow colour	Negative reaction

Storage and Shelf Life

Store between 10-30°C. Use before expiry date on the label.

Reference

1. Maxted W. R., 1953, J. Clin. Path., 6:234.

2. Eaton A.D, Clesceri L.S. Greenberg. A.W, 2005, Standard Methods for the Examination of Water and wastewater, 21st edn, APHA. Washington. DC.
3. Mackie and McCartney, 1996, Practical Medical Microbiology, 14th ed., Vol. 2, Collee, Duguid, Fraser and Marmion (Eds.), Churchill Livingstone, Edinburgh.

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Lysine Hydrochloride discs

DD049

Lysine Hydrochloride discs are used for lysine decarboxylation test.

Directions

To determine lysine decarboxylation, the Lysine disc (DD049) is added in the Decarboxylase Broth Base, Moeller (M393) which is used as a negative control for studying decarboxylation or as a base for the addition of amino acids. The test organism is inoculated into the broth containing the Lysine disc (DD049). The inoculated tubes are overlaid with sterile mineral oil and incubated at 35-37°C for up to 4 days. A purple colour indicates the lysine decarboxylation.

Principle And Interpretation

Amino acid discs are used to differentiate the microorganisms on the basis of their ability to decarboxylate the amino acids. Lysine is an essential amino acid. Moeller introduced the Decarboxylase Broth for detecting the production of lysine and ornithine decarboxylase and arginine dihydrolase (1). Prior to Moellers work, bacterial amino acid decarboxylases were studied by Gale (2), Gale and Epps (3). Moeller Decarboxylase Broth Base (M393) contains dextrose which is the fermentable carbohydrate and pyridoxal is the co-factor for the decarboxylase enzyme. Bromo cresol purple and cresol red are the pH indicators in this medium. When the medium is inoculated with the dextrose fermenting bacteria, the pH is lowered due to acid production, which changes the colour of the indicator from purple to yellow. Acid produced stimulates decarboxylase enzyme. Decarboxylation of lysine yields cadaverine. Formation of this amine increases the pH of the medium, changing the colour of the indicator from yellow to purple. If the organisms do not produce the appropriate enzyme, the medium remains acidic, yellow in colour. Inoculated tubes must be protected from air with a layer of sterile mineral oil. Exposure to air may cause alkalization at the surface of the medium which makes the test invalid.

Positive Test: Colour of the medium changes from yellow to purple

Negative Test: Colour of the medium changes to yellow or there is no change

Quality Control

Appearance

Filter paper discs of 10 mm diameter

Cultural Response

Cultural characteristics observed in Moeller Decarboxylase Broth Base (M393) with added Lysine Hydrochloride discs (DD049) after an incubation at 35-37°C upto 4 days (Inoculated tubes are overlaid with sterile mineral oil) .

Cultural Response

Organism	Inoculum (CFU)	Lysine decarboxylation
Cultural Response		
<i>Citrobacter freundii</i> ATCC 8090	50-100	negative reaction, yellow colour
<i>Enterobacter aerogenes</i> ATCC 13048	50-100	positive reaction, purple colour
<i>Escherichia coli</i> ATCC 25922	50-100	variable reaction
<i>Klebsiella pneumoniae</i> ATCC 13883	50-100	positive reaction, purple colour
<i>Proteus mirabilis</i> ATCC 25933	50-100	negative reaction, yellow colour

<i>Proteus vulgaris</i> ATCC 13315	50-100	negative reaction, yellow colour
<i>Pseudomonas aeruginosa</i> ATCC 9027	50-100	negative reaction, yellow colour
<i>Salmonella Paratyphi A</i> ATCC 9150	50-100	negative reaction, yellow colour
<i>Salmonella Typhi</i> ATCC 6539	50-100	positive reaction, purple colour
<i>Serratia marcescens</i> ATCC 8100	50-100	positive reaction, purple colour
<i>Shigella dysenteriae</i> ATCC 13313	50-100	negative reaction, yellow colour
<i>Shigella flexneri</i> ATCC 12022	50-100	negative reaction, yellow colour
<i>Shigella sonnei</i> ATCC 25931	50-100	negative reaction, yellow colour

Storage and Shelf Life

Store the discs at 10-30°C. Use before expiry date on the label.

Reference

1. Moeller V., 1955, Acta Pathol. Microbiol. Scand. 36:158.
2. Gale G. F., 1940, Biochem. J., 34:392.
3. Gale and Epps, 1943, Nature, 152:327.

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Arginine Hydrochloride discs

DD050

Arginine hydrochloride discs are used for Arginine hydrolysis test.

Directions

To determine Arginine hydrolysis, the Arginine disc (DD050) is added in the Decarboxylase Broth Base, Moeller (M393) which is used as a negative control for studying hydrolysis or as a base for the addition of amino acids. The test organism is inoculated into the broth containing the Arginine disc (DD050). The inoculated tubes are overlaid with sterile mineral oil and incubated at 35-37°C for up to 4 days. A purple colour indicates the Arginine hydrolysis.

Principle And Interpretation

Amino acid discs are used to differentiate the microorganisms on the basis of their ability to decarboxylate the amino acids. Arginine is a non-essential amino acid. Moeller introduced the Decarboxylase Broth for detecting the production of lysine and ornithine decarboxylase and arginine dihydrolase (1). Prior to Moeller's work, bacterial amino acid decarboxylases were studied by Gale (2), Gale and Epps (3). Moeller Decarboxylase Broth Base (M393) contains dextrose which is the fermentable carbohydrate and pyridoxal is the co-factor for the decarboxylase/ dihydrolase enzyme. Bromo cresol purple and cresol red are the pH indicators in this medium. When the medium is inoculated with the dextrose fermenting bacteria, the pH is lowered due to acid production, which changes the colour of the indicator from purple to yellow. Acid produced stimulates dihydrolase enzyme. Hydrolysis of arginine yields putrescine. Formation of this amine increases the pH of the medium, changing the colour of the indicator from yellow to purple. If the organisms do not produce the appropriate enzyme, the medium remains acidic, yellow in colour. Inoculated tubes must be protected from air with a layer of sterile mineral oil. Exposure to air may cause alkalization at the surface of the medium which makes the test invalid.

Positive Test: Colour of the medium changes from yellow to purple.

Negative Test: Colour of the medium changes to yellow or there is no change

Quality Control

Appearance

Filter paper discs of 10 mm diameter

Cultural Response

Cultural characteristics observed in Moeller Decarboxylase Broth Base (M393) with added Arginine Hydrochloride discs (DD050) after an incubation at 35-37°C up to 4 days (Inoculated tubes are overlaid with sterile mineral oil).

Cultural Response

Organism	Inoculum (CFU)	Arginine decarboxylation
Cultural Response		
<i>Citrobacter freundii</i> ATCC 8090	50-100	variable reaction
<i>Enterobacter aerogenes</i> ATCC 13048	50-100	negative reaction, yellow colour
<i>Escherichia coli</i> ATCC 25922	50-100	variable reaction
<i>Klebsiella pneumoniae</i> ATCC 13883	50-100	negative reaction, yellow colour
<i>Proteus mirabilis</i> ATCC 25933	50-100	negative reaction, yellow colour

<i>Proteus vulgaris</i> ATCC 13315	50-100	negative reaction, yellow colour
<i>Pseudomonas aeruginosa</i> ATCC 9027	50-100	positive reaction, purple colour
<i>Salmonella Paratyphi A</i> ATCC 9150	50-100	delayed positive reaction/ positive reaction, purple colour
<i>Salmonella Typhi</i> ATCC 6539	50-100	delayed positive reaction / negative reaction, yellow colour
<i>Serratia marcescens</i> ATCC 8100	50-100	negative reaction, yellow colour
<i>Shigella dysenteriae</i> ATCC 13313	50-100	delayed positive reaction/ negative reaction, yellow colour
<i>Shigella flexneri</i> ATCC 12022	50-100	delayed positive reaction/ negative reaction, yellow colour
<i>Shigella sonnei</i> ATCC 25931	50-100	variable reaction

Storage and Shelf Life

Store the discs at 10-30°C. Use before expiry date on the label.

Reference

1. Moeller V., 1955, Acta Pathol. Microbiol. Scand. 36:158.
2. Gale G. F., 1940, Biochem. J., 34:392.
3. Gale and Epps, 1943, Nature, 152:327.

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Ornithine Hydrochloride Discs

DD051

Ornithine Hydrochloride discs are used for Ornithine decarboxylation test.

Directions

To determine ornithine decarboxylation, the Ornithine disc (DD051) is added in the Decarboxylase Broth Base, Moeller (M393) which is used as a negative control for studying decarboxylation or as a base for the addition of amino acids. The test organism is inoculated into the broth containing the Ornithine disc (DD051). The inoculated tubes are overlaid with sterile mineral oil and incubated at 35-37°C for up to 4 days. A purple colour indicates the Ornithine decarboxylation.

Principle And Interpretation

Amino acid discs are used to differentiate the microorganisms on the basis of their ability to decarboxylate the amino acids. Ornithine is an essential amino acid. Moeller introduced the Decarboxylase Broth for detecting the production of lysine and ornithine decarboxylase and arginine dihydrolase (1). Prior to Moellers work, bacterial amino acid decarboxylases were studied by Gale (2), Gale and Epps (3). Moeller Decarboxylase Broth Base (M393) contains dextrose which is the fermentable carbohydrate and pyridoxal is the co-factor for the decarboxylase enzyme. Bromo cresol purple and cresol red are the pH indicators in this medium. When the medium is inoculated with the dextrose fermenting bacteria, the pH is lowered due to acid production, which changes the colour of the indicator from purple to yellow. Acid produced stimulates decarboxylase enzyme. Ornithine decarboxylation yields putrescine. Formation of this amine increases the pH of the medium, changing the colour of the indicator from yellow to purple. If the organisms do not produce the appropriate enzyme, the medium remains acidic, yellow in colour. Inoculated tubes must be protected from air with a layer of sterile mineral oil. Exposure to air may cause alkalinization at the surface of the medium which makes the test invalid.

Positive Test: Colour of the medium changes from yellow to purple

Negative Test: Colour of the medium changes to yellow or there is no change

Quality Control

Appearance

Filter paper discs of 10 mm diameter

Cultural Response

Cultural characteristics observed in Moeller Decarboxylase Broth Base (M393) with added Ornithine Hydrochloride discs (DD051) after an incubation at 35-37°C up to 4 days (Inoculated tubes are overlaid with sterile mineral oil) .

Cultural Response

Organism	Inoculum (CFU)	Ornithine decarboxylation
Cultural Response		
<i>Citrobacter freundii</i> ATCC 8090	50-100	variable reaction
<i>Enterobacter aerogenes</i> ATCC 13048	50-100	positive reaction, purple colour
<i>Escherichia coli</i> ATCC 25922	50-100	variable reaction
<i>Klebsiella pneumoniae</i> ATCC 13883	50-100	negative reaction, yellow colour
<i>Proteus mirabilis</i> ATCC 25933	50-100	positive reaction, purple colour

<i>Proteus vulgaris</i> ATCC 13315	50-100	negative reaction, yellow colour
<i>Pseudomonas aeruginosa</i> ATCC 9027	50-100	negative reaction, yellow colour
<i>Salmonella Paratyphi A</i> ATCC 9150	50-100	positive reaction, purple colour
<i>Salmonella Typhi</i> ATCC 6539	50-100	negative reaction, yellow colour
<i>Serratia marcescens</i> ATCC 8100	50-100	positive reaction, purple colour
<i>Shigella dysenteriae</i> ATCC 13313	50-100	negative reaction, yellow colour
<i>Shigella flexneri</i> ATCC 12022	50-100	negative reaction, yellow colour
<i>Shigella sonnei</i> ATCC 25931	50-100	positive reaction, purple colour

Storage and Shelf Life

Store the discs at 10-30°C. Use before expiry date on the label.

Reference

1. Moeller V., 1955, Acta Pathol. Microbiol. Scand. 36:158.
2. Gale G. F., 1940, Biochem. J., 34:392.
3. Gale and Epps, 1943, Nature, 152:327.

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GC Selective Supplement

FD021

An antibiotic and enrichment supplement recommended for the selective isolation of pathogenic *Neisseria*.

Composition

Per vial sufficient for 500 ml medium

*Ingredients	Concentration
Yeast autolysate	5g
Colistin methane sulphonate	3.750mg
Dextrose	0.750g
Trimethoprim	2.500mg
Sodium bicarbonate	0.075g
Nystatin	6250Units
Vancomycin	1.500mg

Directions:

Rehydrate the contents of 1 vial aseptically with 15 ml of sterile distilled water. Mix well and add aseptically to 500 ml of sterile, molten, cooled (45-50°C) GC Agar Base [M434](#) / GC HiVeg™ Agar Base [MV434](#) / Thayer Martin Medium Base [M413](#) / Thayer Martin HiVeg™ Medium [MV413](#) along with separately prepared FO Growth Supplement [FD022](#) Base. Mix well and pour into sterile petri plates.

Type of specimen

Clinical samples : urine, respiratory exudates etc.

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (1,2). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning & Precautions

In Vitro diagnostic use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Storage and Shelf Life

Store at 2 - 8°C. Use before expiry date on the label.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (1,2).

Reference

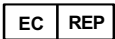
1. Isenberg (Ed.),2004, Clinical Microbiology Procedures Handbook, Vol.3, American Society for Microbiology, Washington. D.C.
2. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology,11th Edition. Vol. 1.

* Not For Medicinal Use

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Limited, Plot No.C-40, Road
No.21Y, MIDC, Wagle Industrial
Area, Thane (W) -400604, MS,
India



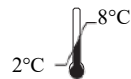
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3951DB Maarn, NL
www.cepartner4u.eu



*In vitro diagnostic
medical device*



CE Marking



Storage temperature



Do not use if
package is damaged

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Technical Data

FO Growth Supplement

FD022

An enrichment supplement recommended for isolation of *Neisseria*.

Composition

Per bottle

Ingredients

Haemoglobin powder

Concentration

50G / 100G

Directions:

A specially prepared powder whose 2% w/v aqueous solution is autoclavable. The aqueous solution is chocolate brown, opaque and contains flocculent dispersible precipitate. It is used for 500 ml medium preparation of GC Agar Base [M434](#) - 5 gms / GC HiVeg™ Agar Base [MV434](#) - 5 gms / Thayer Martin Medium Base [M413](#) - 5 gms / Thayer Martin HiVeg™ Medium Base [MV413](#) - 5 gms / Chocolate No. 2 Agar Base [M1548](#) - 5 gms / Chocolate No. 2 HiVeg™ Agar Base [MV1548](#) - 5 gms / Tellurite Blood Agar Base [M1260](#) - 10 gms / Chocolate Agar Base [M103](#) - 10 gms / Chocolate HiVeg™ Agar Base [MV103](#) - 10 gms / Modified Protease Agar [M1606](#) - 10 gms / Transgrow Medium Base [M1149](#) - 2 gms.

Type of specimen

Clinical samples - Stool, urine, respiratory exudates, etc.

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (1,2). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning & Precautions

In Vitro diagnostic use only. For professional use only. Read the label before opening the container. Wear protective gloves/ protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Storage and Shelf Life

Store at 2 - 8°C. Use before expiry date on the label.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (1,2).

Reference

1. Isenberg (Ed.),2004, Clinical Microbiology Procedures Handbook, Vol.3, American Society for Microbiology, Washington. D.C.
2. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

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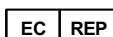
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V.C.N. Supplement

FD023

An antibiotic supplement, recommended for the selective isolation of *Neisseria gonorrhoeae* and *Neisseria meningitidis*.

Composition

Per vial sufficient for 500 ml medium

*Ingredients

Vancomycin

Colistin methane sulphonate

Nystatin

Concentration

1.500mg

3.750mg

6250Units

Directions:

Rehydrate the contents of 1 vial aseptically with 2 ml sterile distilled water. Mix well and aseptically add it to Thayer Martin Medium Base [M413](#) / Thayer Martin HiVeg™ Medium Base [MV413](#)- for 440 ml of medium aseptically add 50ml sterile lysed blood and one vial of V.C.N. Supplement [FD023](#) along with one vial of Vitamino Growth Supplement [FD025](#). FO Growth Supplement (250ml) [FD022](#) can be used instead of sterile lysed blood in 250ml of medium. In GC Agar Base [M434](#)/ GC HiVeg™ Agar Base [MV434](#) for 250 ml of can be used instead of sterile lysed blood in 250 ml of FO Growth Supplement [FD022](#) and GC Selective Supplement [FD021](#), one vial of GC Selective Supplement [FD021](#) for additional selectivity. If desired V.C.N. Supplement [FD023](#) can be used along with GC Selective Supplement [FD021](#) for additional selectivity.

In Transgrow Medium Base [M1149](#) for 440 ml of medium aseptically add 50 ml of sterile FO Growth Supplement [FD022](#) and one vial of V.C.N. Supplement [FD023](#) along with one vial of Vitamino Growth Supplement [FD025](#).

Type of specimen

Clinical samples - Stool, urine, respiratory exudates, etc.

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (1,2). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning & Precautions

In Vitro diagnostic use only. For professional use only. Read the label before opening the container. Wear protective gloves/ protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Storage and Shelf Life

Store at 2-8°C. Use before expiry date on the label.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (1,2).

Reference

- 1.Isenberg (Ed.),2004, Clinical Microbiology Procedures Handbook, Vol.3, American Society for Microbiology, Washington. D.C.
- 2.Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology,11th Edition. Vol. 1.

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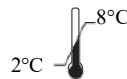
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CTN Selective Supplement

FD034

An antibiotic supplement recommended for the selective isolation of *Yersinia enterocolitica*.

Composition

Per vial sufficient for 500 ml medium

*Ingredients	Concentration
Cefsulodin	7.500mg
Triclosan(Irgasan)	2mg
Novobiocin	1.250mg

Directions:

Rehydrate the contents of 1 vial aseptically with 2 ml of sterile distilled water and 1 ml of ethanol. Mix gently to dissolve the contents completely and aseptically add to 500 ml of sterile, molten, cooled (45-50°C) [Yersinia Selective Agar Base M843](#)/Yersinia Selective HiVeg™ Agar Base [MV843](#). Yersinia Selective Agar Base, w/1.2% Agar [M843F](#). HiCrome™ Yersinia Agar Base [M2025](#). Mix well and pour into sterile petri plates.

Type of specimen

Clinical samples - faeces, urine, etc.; Food samples

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (1,2).

For food samples follow appropriate techniques for handling specimens as per established guidelines (3).

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning & Precautions

In Vitro diagnostic use. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Storage and Shelf Life

Store at 2 - 8°C. Use before expiry date on the label.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (1,2).

Reference

1. Isenberg (Ed.), 2004, Clinical Microbiology Procedures Handbook, Vol.3, American Society for Microbiology, Washington. D.C.
2. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
3. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, American Public Health Association, Washington, D.C.

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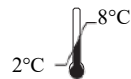
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KL Virulence Enrichment (20 ml per vial)

FD072

Recommended for cultivation and in vitro toxicity testing of *Corynebacterium diphtheria*.

Composition

Per vial sufficient for 100 ml medium

Ingredients	Concentration
Acicase™#	10.00g
Glycerol	10.0ml
Polysorbate 80	10.0ml

Equivalent to Casein acid hydrolysate

Directions:

Warm up the refrigerated contents of 1 vial to 50°C and aseptically add 2 ml in 100 mm sterile petri plate along with 0.5 ml of 1% PTe Selective Supplement [FD052](#). Quickly add 10 ml sterile molten, cooled (45-50°C) Diphtheria Virulence Agar Base [M882](#)/ Diphtheria Virulence HiVeg™ Agar Base [MV882](#) . Mix well and pour into sterile Petri plate.

Type of specimen

Clinical samples- Throat swab, nasal swab, wound swab, pus, etc.; Food samples

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (1,2).
For food samples follow appropriate techniques for handling specimens as per established guidelines (3).
After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning & Precautions

In Vitro diagnostic use. For professional use only. Read the label before opening the container. Wear protective gloves/ protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Storage and Shelf Life

Store at 2 - 8°C. Use before expiry date on the label.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (1,2).

Reference

1. Isenberg (Ed.),2004, Clinical Microbiology Procedures Handbook, Vol.3, American Society for Microbiology, Washington. D.C.
2. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology,11th Edition. Vol. 1.
3. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.

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Tinsdale Selective Supplement (Part A & Part B)

FD073

A selective supplement recommended for the isolation and presumptive identification of *Corynebacterium diphtheriae*.

Composition

Per vial sufficient for 1000 ml medium

Ingredients	Concentration
Part A	
Horse serum	100ml
Part B	
Potassium tellurite	1ml

Directions:

Warm up the refrigerated contents of Part B vial and aseptically add 29 ml sterile distilled water. Mix thoroughly. Aseptically add warmed up (to 50°C) contents of Part A and B vials to sterile, molten, cooled (45-50°C) Tinsdale Agar Base [M314](#) / Tinsdale HiVeg™ Agar Base [MV314](#) as required. Mix well and pour into sterile petri plates.

For 10 ml of M314 : 1.0 ml of Part A and 0.3 ml of Part B, is recommended.

Type of specimen

Clinical samples- Throat swab, nasal swab, wound swab, pus, etc.; Food samples

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (1,2).

For food samples follow appropriate techniques for handling specimens as per established guidelines (3).

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning & Precautions

In Vitro diagnostic use. For professional use only. Read the label before opening the container. Wear protective gloves/ protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Storage and Shelf Life

Store at 2 - 8°C. Use before expiry date on the label.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (1,2).

Reference

1. Isenberg (Ed.), 2004, Clinical Microbiology Procedures Handbook, Vol.3, American Society for Microbiology, Washington, D.C.
2. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

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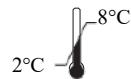
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Technical Data

Fraser Selective Supplement

FD125I

Recommended for selective isolation and enumeration of *Listeria monocytogenes* from food, animal feeds etc.

Composition

Per vial sufficient for 500 ml / 1000 ml medium

*Ingredients	Concentration
Acriflavin hydrochloride	12.500mg
Nalidixic acid	10mg

Directions:

Rehydrate the contents of 1 vial aseptically with 10 ml of sterile distilled water. Mix well. Aseptically add 1 vial to 1000 ml sterile, cooled (45-50°C) Fraser Broth Base [M1327](#) / Fraser HiVeg™ Broth Base [MV1327](#) / Fraser Enrichment Broth Base [M1083R](#) for primary enrichment or to 500 ml sterile, Fraser Broth Base [M1327](#) / Fraser HiVeg™ Broth Base [MV1327](#) / Fraser Enrichment Broth Base [M1083R](#) for secondary enrichment. Mix well and dispense as desired.

Type of specimen

Food samples

Specimen Collection and Handling

For Food samples follow appropriate techniques for handling specimens as per established guidelines (1,2). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning & Precautions

Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Storage and Shelf Life

Store at 2 - 8°C. Use before expiry date on the label.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (3,4).

Reference

1. Microbiology of the food chain — Horizontal method for the detection and enumeration of *Listeria monocytogenes* and of *Listeria* spp. - Part 1 , Detection method ; ISO 11290-1:2017.
2. Microbiology of the food chain — Horizontal method for the detection and enumeration of *Listeria monocytogenes* and of *Listeria* spp.- Part2, Enumeration method ; ISO 11290-2:2017
3. Isenberg (Ed.),2004, Clinical Microbiology Procedures Handbook, Vol.3, American Society for Microbiology, Washington. D.C.
4. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

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Fraser Supplement

FD141

Recommended for selective isolation and enumeration of *Listeria monocytogenes* from food, animal feeds etc.

Composition

Per vial sufficient for 500 ml medium

Ingredients

Ferric ammonium citrate

Concentration

250mg

Directions:

Rehydrate the contents of 1 vial aseptically with 1-2 ml of sterile distilled water. Mix well. For primary enrichment aseptically add 2 vials to 1000 ml, sterile, cooled (45-50°C) Fraser Broth Base [M1327](#) / Fraser HiVeg™ Broth Base [MV1327](#) / Fraser Broth Base, Granulated [GM1327](#) along with rehydrated contents of 1 vial of Fraser Selective Supplement [FD1251](#) or add 1 vial to 500 ml sterile Fraser Broth Base [M1327](#) / Fraser HiVeg™ Broth Base [MV1327](#)/ Fraser Broth Base, Granulated [GM1327](#) along with rehydrated contents of 1 vial of Fraser Selective Supplement [FD1251](#) for secondary enrichment. Aseptically add 2 vials to 1000 ml, sterile, cooled (45-50°C) Fraser Broth Base, Modified (Half Fraser Broth) [M1764](#). Mix well before dispensing as desired.

Type of specimen

Food samples

Specimen Collection and Handling

For Food samples follow appropriate techniques for handling specimens as per established guidelines (1,2). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning & Precautions

Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Storage and Shelf Life

Store between 10 - 30°C. Use before expiry date on the label.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (3,4).

Reference

1. Microbiology of the food chain — Horizontal method for the detection and enumeration of *Listeria monocytogenes* and of *Listeria* spp. - Part 1 , Detection method ; ISO 11290-1:2017.
2. Microbiology of the food chain — Horizontal method for the detection and enumeration of *Listeria monocytogenes* and of *Listeria* spp.- Part2, Enumeration method ; ISO 11290-2:2017
3. Isenberg (Ed.),2004, Clinical Microbiology Procedures Handbook, Vol.3, American Society for Microbiology, Washington. D.C.
4. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

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Van10 Selective Supplement

FD233

Recommended for selective isolation of *Cronobacter sakazakii*.

Composition

Per vial sufficient for 1000 ml medium

*Ingredients	Concentration
Vancomycin	10mg

Directions:

Rehydrate the content of 1 vial aseptically with 10 ml sterile distilled water. Mix well and aseptically add it to 1000 ml of sterile, cooled (45-50°C) Modified Lauryl Sulphate Tryptose Broth [M1643](#)/Cronobacter Screening Broth [M1786](#)/ Cronobacter Selective Broth (CSB) [M1786I](#). Mix well and pour into sterile tubes.

Type of specimen

Food samples

Specimen Collection and Handling

For food samples follow appropriate techniques for handling specimens as per established guidelines (1,2). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning & Precautions

For professional use only. Read the label before opening the container. Wear protective gloves/ protective clothing / eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Storage and Shelf Life

Store at 2 - 8°C. Use before expiry date on the label.

Disposal

User must ensure safe disposal by autoclaving and/ or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (3,4).

Reference

1. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.
2. International Organization for Standardization. Microbiology of the food chain- Horizontal method for the detection of *Cronobacter* spp. Draft ISO/ TS 22964, 2017 (E).
3. Isenberg (Ed.),2004, Clinical Microbiology Procedures Handbook, Vol.3, American Society for Microbiology, Washington. D.C.
4. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

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Ch250 Selective Supplement

FD283R

An antibiotic supplement recommended for the selective isolation of *Candida* species.

Composition

Per vial sufficient for 500 ml medium

*Ingredients

Chloramphenicol

Concentration

250mg

Directions:

Rehydrate the contents of 1 vial aseptically with 2 ml of 95% queoua ethanol. Mix well and aseptically add to 500 ml of sterile, molten cooled (45-50°C) HiCrome™ Candida Differential Agar Base [M1297AR](#). Mix well and pour into sterile Petri plates.

Type of specimen

Clinical samples - Blood; Food and dairy samples

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (1,2). For food and dairy samples follow appropriate techniques for handling specimens as per established guidelines (3,4). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning & Precautions

In Vitro diagnostic use. For professional use only. Read the label before opening the container. Wear protective gloves/ protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

Storage and Shelf Life

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Disposal

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Reference

- 1.Isenberg (Ed.),2004, Clinical Microbiology Procedures Handbook, Vol.3, American Society for Microbiology, Washington. D.C.
- 2.Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology,11th Edition. Vol. 1.
- 3.American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
- 4.Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.

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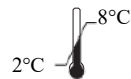
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PN Selective Supplement

FD307

An antibiotic Supplement recommended for rapid detection of *Clostridium perfringens* in food.

Composition

Per vial sufficient for 1000 ml medium

*Ingredients	Concentration
Neomycin sulfate	0.150g
Polymyxin B Sulfate	0.025g

Directions:

Rehydrate the contents of 1 vial aseptically with 10 ml sterile distilled water. Mix well and aseptically add to 1000 ml of sterile, molten, cooled (45-50°C) Rapid Perfringens Medium Base [M1898](#). Mix well and pour into sterile Petri plates.

Type of specimen

Food samples

Specimen Collection and Handling

For Food samples follow appropriate techniques for handling specimens as per established guidelines (1).

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning & Precautions

For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Storage and Shelf Life

Store at 2 - 8°C. Use before expiry date on the label.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (2,3).

Reference

1. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.
2. Isenberg (Ed.), 2004, Clinical Microbiology Procedures Handbook, Vol.3, American Society for Microbiology, Washington, D.C.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

* Not For Medicinal Use

Revision : 01/2023

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Sabouraud Dextrose Agar, Granulated[®]

GM063

Intended Use:

Recommended for the cultivation of yeasts, moulds and aciduric microorganisms from clinical and non-clinical samples.

Composition**

Ingredients	g / L
Dextrose (Glucose)	40.000
Mycological, peptone	10.000
Agar	15.000
Final pH (at 25°C)	5.6±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 65.0 gram in 1000 ml purified/distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Mix well and pour into sterile Petri plates.

Principle And Interpretation

Sabouraud Dextrose Agar is Carlier's modification (1) of the formulation described by is a modification of Sabouraud Dextrose Agar which is described by Sabouraud (2) for the cultivation of fungi (yeasts, moulds), particularly useful for the fungi associated with skin infections. This medium is also employed to determine microbial contamination in food, cosmetics, and clinical specimens (3,4). This medium is recommended by ISO 11133 for recovery of fungi and as a reference medium for other selective media for fungi (5)

Mycological Peptone provides nitrogenous compounds. Dextrose provides an energy source. High dextrose concentration and low pH favors fungal growth and inhibits contaminating bacteria from test samples .

Type of specimen

Clinical samples: skin scrapings, Food samples ; Cosmetics.

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (3-4).

For food and dairy samples, follow appropriate techniques for sample collection and processing as per guidelines(5-9).

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions:

In Vitro diagnostic use. For professional use only. Read the label before opening the container. Wear protective gloves/ protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. For heavily contaminated samples, the plate must be supplemented with inhibitory agents for inhibiting bacterial growth with lower pH.
2. Some pathogenic fungi may produce infective spores which are easily dispersed in air, so examination should be carried out in safety cabinet
3. Further biochemical tests should be carried out for confirmation.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to yellow coloured granular media.

Gelling

Firm, comparable with 1.5% Agar gel

Colour and Clarity of prepared medium

Light yellow to amber coloured clear to slightly opalescent gel forms in Petri plates.

Reaction

Reaction of 6.5% w/v aqueous solution at 25°C (after sterilization). pH : 5.6±0.2

pH

5.40-5.80

Cultural Response

Productivity : Cultural response was observed after an incubation at 20-25°C for upto 5 days. Recovery is considered as 100% on previously approved and validated batch of Sabouraud Dextrose Agar

Productivity

Organism	Inoculum (CFU)	Growth	Recovery
<i>Candida albicans</i> ATCC 10231 (00054*)	50 -100	Luxuriant (white colonies)	≥70 %
# <i>Aspergillus brasiliensis</i> ATCC 16404 (00053*)	50 -100	luxuriant	≥70 %
<i>Candida albicans</i> ATCC 2091 (00055*)	50 -100	luxuriant	≥70 %
<i>Saccharomyces cerevisiae</i> ATCC 9763 (00058*)	50 -100	luxuriant	≥70 %
<i>Mucor racemosus</i> ATCC 42647 (00181)*	50 -100	luxuriant	≥70 %
<i>Escherichia coli</i> ATCC 8739 (00012*)	50 -100	luxuriant	≥70 %
<i>Escherichia coli</i> ATCC 25922 (00013*)	50 -100	luxuriant	≥70 %
\$ <i>Lactobacillus paracasei</i> ATCC 334	50 -100	luxuriant	≥70 %
<i>Trichophyton rubrum</i> ATCC 28191		luxuriant	

Key : (*) - Corresponding WDCM numbers.

(#) - Formerly known as *Aspergillus niger*

(\$) - Formerly known as *Lactobacillus casei*

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 20-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (8,9).

Reference

- 1.Carlier G. I. M., 1948, Brit. J. Derm. Syph., 60:61.
- 2.Sabouraud K., 1892, Ann. Dermatol. Syphilol, 3:1061.
- 3.Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
- 4.Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
- 5.Microbiology of food,animal feeding stuffs and water- Preparation, production,storage and performance testing of culture media, EN ISO 11133:2014 /Amd. 2 :2020 (E).

6. Bacteriological Analytical Manual, 8th Edition, Revision A, 1998. AOAC, Washington D.C.
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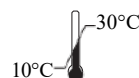
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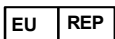
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Plot No.C-40, Road No.21Y,
MIDC,WagleIndustrial Area,
Thane (W) -400604, MS, India



In vitro diagnostic
medical device



Storage temperature



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HiDip™ Mac-HiCrome™ UTI Medium

HD007

Intended Use:

Recommended for easy and fast detection of urinary tract microorganisms.

Composition**

Ingredients	g/ L
MacConkey Agar	
Gelatin peptone	17.000
Tryptone	1.500
Peptone	1.500
Lactose	10.000
Bile salts	1.500
Sodium chloride	5.000
Neutral red	0.030
Crystal violet	0.001
Agar	15.000
Final pH (at 25°C)	7.1±0.2

**Formula adjusted, standardized to suit performance parameters

HiCrome™ UTI Medium

Peptone, special	15.000
Chromogenic mixture	2.450
Agar	15.000
Final pH (at 25°C)	6.8±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

1. Surfaces : Loosen cap and remove HiDip™ slide from container taking care not to touch agar surfaces. Check for dehydration or contamination. Gently lower the slides and press agar to touch the test surface by bending the scull around the hinge line. Apply even and firm pressure for 15-20 seconds. Take care not to smudge agar over the test surface. Repeat procedure using the second agar surface on an area adjacent to the initial test side. Return the slide to the container and close tightly. Incubate in an up right position at indicated temprature.
2. Liquids: Loosen cap and remove the HiDip™ slide from container. Check for dehydration or contamination. Dip slide into test fluid for upto 15-20 seconds so that agar surface becomes totally covered. (In case of inadequate liquid sample availability, pour sample over the surface of the slide). Allow to drain. Tab it gently to remove excess fluid from surface. Return the slide to the container and close tightly. Incubate in an upright position at indicated temperature. Label the container for sample number, source, date and time etc. for reference.

Principle And Interpretation

MacConkey Agar is a differential medium for the selection and recovery of the *Enterobacteriaceae* and related enteric gram-negative bacilli. This medium is prepared in accordance with USP and contains crystal violet, Nacl and bile salts. It is very selective and suppresses growth of a number of gram-positive bacteria including Staphylococci. HiCrome™ UTI Agar is a differential medium recommended for identification and confirmation of microorganisms mainly causing urinary tract infections. It facilitates and expedites the identification of some gram-negative and some gram-positive bacteria on the basis of different contrasted colony colours produced by reactions of genus or species specific enzymes with two chromogenic substrates to detect presence of β-Glucosidase and β-D-Galactosidase enzyme.

Type of specimen

Clinical samples : Urine, Food and dairy samples, Water samples.

Specimen Collection and Handling

Refer Directions.

Warning and Precautions

In Vitro diagnostic use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye

protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

MacConkey Agar:

1. Though the medium is recommended for selective isolation, further biochemical and serological testing must be carried out for further confirmation.

HiCrome™ UTI Medium:

1. Since it is an enzyme-substrate based reaction, the intensity of colour may vary with isolates.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

The HiDip™ slide contains a combination of sterile MacConkey Agar Medium and HiCrome™ UTI Medium on separate individual surfaces.

Colour

Colour of MacConkey Agar

Red coloured gel with purplish tinge

Colour of HiCrome™ UTI Medium

Light amber coloured medium

Quantity of medium

2.5ml of medium per surface

Sterility Check :

Passes release criteria

pH of MacConkey Agar

pH Range : 6.90-7.30

pH of HiCrome™ UTI Medium

pH Range : 6.60-7.0

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 18-48 hours.

Organism	Growth	Colour of colony
MacConkey Agar		
<i>Escherichia coli</i> ATCC 25922 (00013*)	luxuriant	pink to red with bile precipitate
# <i>Klebsiella aerogenes</i> ATCC 13048 (00175*)	luxuriant	pink to red
<i>Enterococcus faecalis</i> ATCC 29212 (00087*)	fair to good	Pale pink to red
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC 25923 (00034*)	inhibited	-
<i>Salmonella</i> Enteritidis ATCC 13076 (00030*)	luxuriant	colourless
<i>Salmonella</i> Paratyphi B ATCC 8759	luxuriant	colourless
<i>Salmonella</i> Typhi ATCC 6539	luxuriant	colourless
## <i>Proteus hauseri</i> ATCC 13315	luxuriant	colourless
<i>Shigella flexneri</i> ATCC 12022 (00126*)	fair to good	colourless

HiCrome™ UTI Medium

<i>Enterococcus faecalis</i> ATCC 29212 (00087*)	luxuriant	blue, small
<i>Escherichia coli</i> ATCC 25922 (00013*)	luxuriant	pink-purple
<i>Klebsiella pneumoniae</i> ATCC 13883 (00097*)	luxuriant	blue to purple, mucoid
<i>Pseudomonas aeruginosa</i> ATCC 27853 (00025*)	luxuriant	colourless (greenish pigment may be observed)
<i>Proteus mirabilis</i> ATCC 12453	luxuriant	light brown
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC 25923 (00034*)	luxuriant	golden yellow

Key :- * Corresponding WDCM numbers

Formerly known as *Proteus vulgaris*

Formerly known as *Enterobacter aerogenes*

Storage and Shelf Life

Store between 2-8°C. Use before expiry date on the label. Product performance is best if used within stated expiry period.

Disposal

Used HiDip™ slides should be handled carefully, as it contains live microorganisms. These slides can be best disposed off either by or by immersing in a suitable disinfectant solution (i.e. dettol, phenyl etc.) over night or by autoclaving them after loosening the cap.

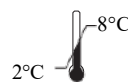
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Plot No.C-40, Road No.21Y,
MIDC, Wagle Industrial Area,
Thane (W) -400604, MS, India



In vitro diagnostic
medical device



Storage temperature



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Bismuth Sulphite Agar (BS)

M027

Intended Use:

Recommended for the selective isolation of *Salmonella* from faeces, urine, sewage and other materials. The composition and performance criteria of this medium are as per specifications laid down in ISO 6579-1:2017.

Composition**

ISO 6579-1 Specification -Bismuth Sulphite Agar

Ingredients	g/ L
Enzymatic digest of animal tissues Meat extract	10.000
Dextrose	5.000
Disodium hydrogen phosphate, anhydrous	4.000
Ferrous sulphate, anhydrous	0.300
Bismuth sulphite indicator	8.000
Brilliant green	0.025
Agar	20.000
Final pH (at 25°C)	7.7±0.2

Bismuth Sulphite Agar

(BS) Ingredients	g/ L
Peptone #	10.000
HM extract ##	5.000
Dextrose (Glucose)	5.000
Disodium hydrogen phosphate, anhydrous	4.000
Ferrous sulphate, anhydrous	0.300
Bismuth sulphite indicator	8.000
Brilliant green	0.025
Agar	20.000
Final pH (at 25°C)	7.7±0.2

**Formula adjusted, standardized to suit performance parameters

- Equivalent to Enzymatic digest of animal tissues ##-Equivalent to Meat extract

Directions

Suspend 52.33 grams in 1000 ml purified/distilled water. Heat to boiling to dissolve the medium completely. **DO NOT STERILIZE IN AUTOCLAVE** or by fractional sterilization since overheating may destroy the selectivity of the medium. The sensitivity of the medium depends largely upon uniform dispersion of precipitated bismuth sulphite in the final gel, which should be dispersed before pouring into sterile Petri plates.

Principle And Interpretation

The Salmonellae constitute the most taxonomically complex group of bacteria among *Enterobacteriaceae* (1). Human *Salmonella* infections are most commonly caused by ingestion of food, water or milk contaminated by human or animal excreta. Humans are the only reservoirs of *S.Typhi* (2). Of the various media employed for the isolation and preliminary identification of *Salmonellae*, particularly *Salmonella Typhi*; Bismuth Sulphite Agar is the most productive. Bismuth Sulphite Agar is a modification of original Wilson and Blair Medium (3-5). It is also recommended by various Associations (2,6-8) for the isolation and preliminary identification of *Salmonella Typhi* and other *Salmonellae* from pathological materials, sewage, water, food and other products. Bismuth Sulphite Agar (M027I) is recommended for selective isolation and enumeration of *Salmonella* species in accordance with ISO Committee (8). *S.Typhi*, *S.Enteritidis* and *S.Typhimurium* typically grow as black colonies with or without a surrounding metallic sheen resulting from hydrogen sulphide production and reduction of sulphite to black ferric sulphide. *Salmonella Paratyphi A* grows as light green colonies. Bismuth Sulphite Agar may be inhibitory to some strains of *Salmonella* species and therefore should not be used as the sole selective medium for these organisms. Also this medium favors use of larger inoculum as compared to other selective media, as it has unique inhibitory action towards gram-positive organisms and coliforms.

Peptone and HM extract serve as sources as carbon, nitrogen, long chain amino acids, vitamins and essential growth factors. Dextrose is the carbon source. Disodium phosphate maintains the osmotic equilibrium. Bismuth sulphite indicator along with brilliant green inhibits the intestinal gram-positive and gram-negative bacteria. Ferrous sulphate aids in detection of hydrogen sulphide production. In case of food samples, pre-enrichment of the sample is done prior to inoculation.

Type of specimen

Clinical samples- faeces,urine,Food and meat samples. milk and milk products, animal feed, animal faeces, environmental samples.

Specimen Collection and Handling

Processing : (8)

Pre-enrichment : Samples (25 grams in 225 ml) are pre-enriched in Buffered Peptone Water (M1494I) and incubated at 34°C to 38°C for 18 h ± 2 hours.

Please refer disclaimer Overleaf.

Selective enrichment: 0.1 ml of pre- enriched sample is inoculated in 10 ml RVS Broth (M1448I) or MSR V Agar (M1428) and incubated at $41.5 \pm 1^\circ\text{C}$ for 24 ± 3 hours and 1 ml of culture is inoculated in MKTT broth (M1496I) and incubated at $37 \pm 1^\circ\text{C}$ for 24 ± 3 hours. In-case of *Salmonella* Typhi and *Salmonella* Paratyphi A selective enrichment is carried out in Selenite Cystine broth and then incubated at $37 \pm 1^\circ\text{C}$ for $24 \text{ h} \pm 3 \text{ h}$ and $48 \text{ h} \pm 3 \text{ h}$.

Isolation : The culture thus obtained is then plated on Bismuth Sulphite Agar (BS) (M027) and incubated at $37 \pm 1^\circ\text{C}$ for 24 ± 3 hours. An additional incubation of 24 ± 3 hours is recommended. Simultaneously plating on isolation agar XLD Agar, Modified (M031I) is carried out.

Confirmation : Biochemical and serological tests are performed for confirmation.

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (7,9).

Warning and Precautions

In Vitro diagnostic use. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. **DO NOT AUTOCLAVE OR OVERHEAT THE MEDIUM**, as it destroys the selectivity of the medium.
2. *S.Typhi* and *S.Arizonae* exhibit typical brown colonies , with or without metallic sheen.
3. This medium is highly selective and must be used in parallel with less selective media for isolation.
4. With certain *Salmonella* species, typical black colonies with metallic sheen is observed near heavy inoculation and isolated colonies may show green colonies.
5. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Light yellow to greenish yellow homogeneous free flowing powder.

Gelling

Firm, comparable with 2.0% agar gel.

Colour and Clarity of prepared medium

Greenish yellow coloured, opalescent with flocculent precipitate forms in Petri plates.

Reaction

Reaction of 5.23% w/v aqueous solution at 25°C . pH : 7.7 ± 0.2 .

pH

7.50-7.90

Cultural Response

Cultural response was observed after an incubation at $37 \pm 1^\circ\text{C}$ for 24 ± 3 hours. The plates are further incubated for an additional 24 ± 3 hours. Recovery rate is considered as 100% for bacteria growth on Soyabean Casein Digest Agar.

Organism	Inoculum (CFU)	Growth	Recovery	Colour of Colony
Productivity				
<i>Salmonella</i> Typhimurium ATCC 14028 (00031*)	50 -100	good	$\geq 50\%$	Brown, grey or black colonies usually with a metallic sheen after 24 hours becoming uniformly black after 48 hours.
<i>Salmonella</i> Enteritidis ATCC 13076 (00030*)	50 -100	good	$\geq 50\%$	Brown, grey or black colonies usually with a metallic sheen after 24 hours becoming uniformly black after 48 hours.
Selectivity & Specificity				
<i>Escherichia coli</i> ATCC 8739 (00012*)	$\geq 10^4$	growth or partial inhibition		Dull green or brown colonies without metallic sheen
<i>Escherichia coli</i> ATCC 25922 (00013*)	$\geq 10^4$	growth or partial inhibition		Dull green or brown colonies without metallic sheen

Selectivity

<i>Enterococcus faecalis</i> ATCC 29212 (00087*)	$\geq 10^4$	inhibited	0 %	-
<i>Enterococcus faecalis</i> ATCC 19433 (00009*)	$\geq 10^4$	inhibited	0 %	-

Additional testing

<i>Salmonella</i> Typhi ATCC 6539	50 -100	good	≥ 50 %	Brown, grey or black colonies usually with a metallic sheen after 24 hours becoming uniformly black after 48 hours.
<i>Salmonella</i> Paratyphi A ATCC 9150	50 -100	good	≥ 50 %	Brown, grey or black colonies usually with a metallic sheen after 24 hours becoming uniformly black after 48 hours.

Key : *Corresponding WDCM numbers.

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 20-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques (7, 9).

Reference

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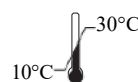
Revision : 04/2026



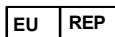
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**In vitro diagnostic
medical device**



Storage temperature



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Endo Agar, Special

M029R

Endo Agar, Special is recommended for the detection of coliform and other enteric organisms.

Composition**

Ingredients	Gms / Litre
Peptone, special	11.500
Lactose	12.900
Dipotassium phosphate	0.480
Monopotassium phosphate	0.220
Sodium chloride	3.600
Sodium sulphite	0.860
Sodium lauryl sulphate	0.010
Basic fuchsin	0.830
Agar	9.600
Final pH (at 25°C)	7.3±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 40.0 grams in 1000 ml distilled water. Boil to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Mix well and pour into sterile Petri plates.

Caution: Basic Fuchsin is a potential Carcinogen and care should be taken to avoid inhalation of the powdered dye and contamination of the skin.

Principle And Interpretation

Endo (1) had first developed a culture medium for differentiation of lactose fermentors and non-fermentors and further developed as today's Endo Agar (2). Endo agar is used for microbiological examination of potable water and waste water, dairy products and food (3,4,5).

Sodium sulphite and basic fuchsin has inhibitory effect on gram-positive microorganisms. Sodium Lauryl sulphate inhibits many organisms other than coliforms. Lactose fermenting coliforms produce aldehyde and acid. The aldehyde in turn liberates fuchsin from the fuchsin-sulphite complex, giving rise to a red colouration of colonies. With *Escherichia coli* this reaction is very pronounced that the fuchsin crystallises, exhibiting to the colonies a permanent greenish metallic lustre (fuchsin lustre). The phosphates buffer the medium. Peptone special provides essential nutrients especially nitrogenous for the coliforms.

Quality Control

Appearance

Light pink to purple homogeneous free flowing powder

Gelling

Firm, comparable with 0.96% Agar gel.

Colour and Clarity of prepared medium

Pink Clear to slightly opalescent gel with a slight precipitate forms in Petri plates.

Reaction

Reaction of 4.0% w/v aqueous solution at 25°C. pH : 7.3±0.2

pH

7.10-7.50

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Cultural Response

Organism	Growth	Inoculum (CFU)	Recovery	Colour of Colony
Cultural Response				
<i>Bacillus subtilis</i> ATCC 6633	inhibited	$\geq 10^3$	0%	
<i>Enterobacter aerogenes</i> ATCC 13048	good-luxuriant	50-100	$\geq 50\%$	pink
<i>Enterococcus faecalis</i> ATCC 29212	none-poor	50-100	$\leq 10\%$	pink, small
<i>Escherichia coli</i> ATCC 25922	good-luxuriant	50-100	$\geq 50\%$	pink to rose red with metallic sheen
<i>Klebsiella pneumoniae</i> ATCC 13883	good-luxuriant	50-100	$\geq 50\%$	pink, mucoid
<i>Salmonella Typhi</i> ATCC 6539	good-luxuriant	50-100	$\geq 50\%$	colourless to pale pink
<i>Staphylococcus aureus</i> ATCC 25923	inhibited	$\geq 10^3$	0%	
<i>Pseudomonas aeruginosa</i> ATCC 27853	good-luxuriant	50-100	$\geq 50\%$	colourless, irregular
<i>Proteus vulgaris</i> ATCC 13315	good-luxuriant	50-100	$\geq 50\%$	colourless to pale pink
<i>Shigella sonnei</i> ATCC 25931	good-luxuriant	50-100	$\geq 50\%$	colourless to pale pink

Storage and Shelf Life

Store below 30°C in tightly closed container and prepared medium at 2 – 8°C away from light to avoid photo-oxidation. Use before expiry date on the label.

Reference

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Phenol Red Broth Base

M054

Intended Use:

A basal medium to which carbohydrates are added for determination of fermentation reactions of pure cultures of microorganisms. The composition of this medium is in accordance with FDA BAM.

Composition**

Ingredients	g / L
Proteose peptone	10.000
HM peptone B #	1.000
Sodium chloride	5.000
Phenol red	0.018
Final pH (at 25°C)	7.4±0.2

**Formula adjusted, standardized to suit performance parameters

Equivalent to Beef extract

Directions

Suspend 16.02 grams in 1000 ml purified/distilled water, mix well. Heat if necessary to dissolve the medium completely. Mix well and dispense in fermentation tubes (tubes containing inverted Durham's tubes). Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Aseptically add filter sterilized or autoclave sterilized carbohydrate solution to sterile basal medium.

Principle And Interpretation

Phenol Red Broth Medium is formulated as per Vera (1) and is recommended to determine the fermentation reaction of carbohydrates for the differentiation of microorganisms (2-4). It is recommended by FDA BAM (5). Phenol Red Broth Medium with various added carbohydrates serves as a differential medium by aiding in differentiation of various species and genera by their ability to ferment the specific carbohydrate, with the production of acid or acid and gas (6). Phenol Red Broth Base is a complete medium without added carbohydrate, which can be used with the addition of 5-10 %, desired carbohydrate. It is used as a negative control for studying fermentations or as a base for the addition of carbohydrates. Proteose peptone and HM peptone B serve as sources for carbon and nitrogen. Sodium chloride is the osmotic stabilizer. Phenol red is the pH indicator, which turns yellow at acidic pH. Gas formation is seen in Durhams tubes. All of the Enterobacteriaceae grow well in this medium. In addition to producing a pH colour shift, the production of mixed acids, notably butyric acids, often results in a pungent, foul odour from the culture medium (7).

Type of specimen

Isolated Microorganisms from clinical and non clinical sample

Specimen Collection and Handling:

For isolated Microorganisms samples follow appropriate techniques for handling specimens as per established guidelines (8,9). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

In Vitro diagnostic use. For professional use only. Read the label before opening the container. Wear protective gloves/ protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. In addition to producing a pH colour shift, the production of mixed acids, notably butyric acids, often results in a pungent, foul odour from the culture medium (2).

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Light yellow to pink coloured homogeneous free flowing powder

Colour and Clarity of prepared medium

Red coloured clear solution without any precipitate

Reaction

Reaction of 1.6% w/v aqueous solution at 25°C. pH : 7.4±0.2

pH

7.20-7.60

Cultural Response

Cultural characteristics observed after an incubation at 35 - 37°C for 18 - 24 hours.

Organism	without carbohydrate, (Acid)	without carbohydrate, (Gas)	with dextrose, (Acid)	with dextrose, (Gas)
<i>Citrobacter freundii</i> ATCC 8090	Negative reaction, no colour change	Negative reaction	Positive reaction, yellow colour	Positive reaction
<i>Escherichia coli</i> ATCC 25922 (00013*)	Negative reaction, no colour change	Negative reaction	Positive reaction, yellow colour	Positive reaction
# <i>Klebsiella aerogenes</i> ATCC 13048 (00175*)	Negative reaction, no colour change	Negative reaction	Positive reaction, yellow colour	Positive reaction
<i>Klebsiella pneumoniae</i> ATCC 13883 (00097*)	Negative reaction, no colour change	Negative reaction	Positive reaction, yellow colour	Positive reaction
## <i>Proteus hauseri</i> ATCC 13315	Negative reaction, no colour change	Negative reaction	Positive reaction, yellow colour	Positive reaction
<i>Salmonella Typhi</i> ATCC 6539	Negative reaction, no colour change	Negative reaction	Positive reaction, yellow colour	Positive reaction
<i>Salmonella Typhimurium</i> ATCC 14028 (00031*)	Negative reaction, no colour change	Negative reaction	Positive reaction, yellow colour	Positive reaction
<i>Serratia marcescens</i> ATCC 8100	Negative reaction, no colour change	Negative reaction	Positive reaction, yellow colour	Positive reaction
<i>Shigella flexneri</i> ATCC 12022 (00126*)	Negative reaction, no colour change	Negative reaction	Positive reaction, yellow colour	Negative reaction

Key : (*) Corresponding WDCM numbers,

(#) Formerly known as *Enterobacter aerogenes*

Formerly known as *Proteus vulgaris*

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 15-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques (8,9).

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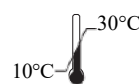
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Thane (W) -400604, MS, India



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Bile Broth Base

M071

Intended Use:

Recommended for cultivation of members of the *Enterobacteriaceae* and in culture of blood clots from patients with suspected enteric fever.

Composition**

Ingredients	g / L
Peptone	20.000
Sodium taurocholate	5.000
Sodium chloride	5.000
Final pH (at 25°C)	7.6±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 30.0 grams in 1000 ml distilled/purified water. Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C and add 1 ml of Streptokinase solution (100000 units/ml). Mix well and dispense into tubes or flasks as desired.

Principle And Interpretation

Enterobacteriaceae inhabit a wide variety of niches that include the human gastrointestinal tract and various environmental niches. When blood samples from a patient with suspected enteric fever is submitted for the widal test, it is useful as a routine to culture the clot after separation of serum (1). If it is known that the blood has been withdrawn with strict aseptic precautions, the clot may be placed in a wide tube half-filled with broth, or in a wide mouth screw-capped bottle containing 80 ml of broth. When there is any doubt regarding the presence of contaminating organisms, and this is always a possibility when blood specimens are sent to the laboratory from a distance, the clot should be transferred directly to a tube of sterile ox bile and disintegrated with aseptic precautions. After overnight incubation the bile culture is examined for enteric organism in the usual manner. A method of clot culture with Streptokinase has been recommended (2). Blood is allowed to clot in 5 ml quantities in sterile screw-capped universal containers. The separated serum is removed and 15 ml of 0.5% Bile Broth Base with Streptokinase 100 units/ml is added to each bottle. The streptokinase causes rapid clot lysis with release of bacteria trapped in the clot (2).

Peptone serves as a source of nitrogen, carbon, long chain amino acids and other essential amino acids. Sodium taurocholate inhibits majority of Gram-positive species. Sodium chloride maintains the isotonicity of the medium whereas addition of streptokinase solution causes rapid clot lysis with release of bacteria trapped in the clot (2).

Type of specimen

Clinical samples - Blood clot

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (3,4). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

In Vitro diagnostic Use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. Further biochemical and serological tests must be carried out for complete identification.
2. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium.
3. Each lot of the medium has been tested for the organisms specified on the COA. It is recommended to users to validate the medium for any specific microorganism other than mentioned in the COA based on the user's unique requirement.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Colour and Clarity of prepared medium

Yellow coloured, clear solution without any haziness

Reaction

Reaction of 3.0% w/v aqueous solution at 25°C. pH : 7.6±0.2

pH

7.40-7.80

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 18-48 hours.

Organism	Inoculum (CFU)	Growth
<i>Escherichia coli</i> ATCC 25922 (00013*)	50-100	luxuriant
# <i>Klebsiella aerogenes</i> ATCC 13048 (00175*)	50-100	luxuriant
<i>Salmonella</i> Typhi ATCC 6539	50-100	luxuriant
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC 25923 (00034*)	≥10 ⁴	inhibited

Key : (*) Corresponding WDCM numbers, (#) Formerly known as *Enterobacter aerogenes*

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (3,4).

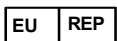
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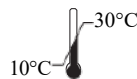
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Kligler Iron Agar

M078

Intended Use:

Recommended for differential identification of gram-negative enteric bacilli from clinical and non-clinical samples on the basis of the fermentation of glucose (dextrose), lactose and hydrogen sulphide production.

Composition**

Ingredients	g / L
Peptone	15.000
HM Peptone B #	3.000
Yeast extract	3.000
Proteose peptone	5.000
Lactose	10.000
Dextrose	1.000
Ferrous sulphate	0.200
Sodium chloride	5.000
Sodium thiosulphate	0.300
Phenol red	0.024
Agar	15.000
Final pH (at 25°C)	7.4±0.2

**Formula adjusted, standardized to suit performance parameters

- Equivalent to Beef extract

Directions

Suspend 57.52 grams in 1000 ml purified/distilled water. Heat to boiling to dissolve the medium completely. Mix well and distribute into tubes. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Allow the tubes to cool in slanted position to form slopes with about 1 inch butts. Best reactions are obtained on freshly prepared medium. Do not use screw capped tubes or bottles.

Note: Avoid overheating otherwise it may produce precipitate in the medium.

Principle And Interpretation

Kligler Iron Agar is a combination of the lead acetate medium described by Kligler (1,2) and Russels Double Sugar Agar (3) and is used as a differentiation medium for typhoid, dysentery and allied bacilli (4). Bailey and Lacey substituted phenol red for andrade indicator previously used as pH indicator (4). Kligler Iron Agar differentiates lactose fermenters from the non-fermenters. It differentiates *Salmonella* Typhi from other Salmonellae and also *Salmonella* Paratyphi A from *Salmonella* Scottmuelleri and *Salmonella* Enteritidis (5). Fermentation of dextrose results in production of acid, which turns the indicator from red to yellow. Since there is little sugar i.e. dextrose, acid production is very limited and therefore a reoxidation of the indicator is produced on the surface of the medium, and the indicator remains red. However, when lactose is fermented, the large amount of acid produced, avoids reoxidation and therefore the entire medium turns yellow. Kligler Iron Agar, in addition to Peptone, HM peptone B and yeast extract, contains lactose and glucose (dextrose), which enables the differentiation of species of enteric bacilli. Phenol red is the pH indicator, which exhibits a colour change in response to acid produced during the fermentation of sugars. The combination of ferrous sulphate and sodium thiosulphate enables the detection of hydrogen sulfide production, which is evidenced by a black color either throughout the butt, or in a ring formation near the top of the butt. Lactose non-fermenters (e.g., *Salmonella* and *Shigella*) initially produce a yellow slant due to acid produced by the fermentation of the small amount of glucose (dextrose). When glucose (dextrose) supply is exhausted in the aerobic environment of the slant, the reaction reverts to alkaline (red slant) due to oxidation of the acids produced. The reversion does not occur in the anaerobic environment of the butt, which therefore remains acidic (yellow butt). Lactose fermenters produce yellow slants and butts because of lactose fermentation. The high amount of acids thus produced helps to maintain an acidic pH under aerobic conditions. Tubes showing original colour of the medium indicates the fermentation of neither glucose (dextrose) nor lactose. Gas production (aerogenic reaction) is detected as individual bubbles or by splitting or displacement of the agar by the formation of cracks in the butt of the medium.

Pure cultures of suspected organisms from plating media such as MacConkey Agar (M081), Bismuth Sulphite Agar (M027) or Deoxycholate Citrate Agar (M065), SS Agar (M108) etc. are inoculated on Kligler Iron Agar for identification.

Type of specimen

Isolated microorganism from clinical, food, dairy and water samples.

Specimen Collection and Handling

For water samples, follow appropriate techniques for sample collection, processing as per guidelines and local standards (6). For food and dairy samples, follow appropriate techniques for sample collection and processing as per guidelines (7,8,9). For clinical samples follow appropriate techniques for handling specimens as per established guidelines (10,11). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic use. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. Results should be noted after 18-24 hours to avoid erroneous results.
2. Straight wire loop should be used for inoculation.
3. Pure isolates should be used to avoid erroneous results.
4. Other biochemical and serological tests must be performed for complete identification

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Light yellow to pink homogeneous free flowing powder

Gelling

Firm, comparable with 1.5% Agar gel

Colour and Clarity of prepared medium

Red coloured, clear to slightly opalescent gel forms in tubes as slants

Reaction

Reaction of 5.75% w/v aqueous solution at 25°C. pH : 7.4±0.2

pH

7.20-7.60

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 18 - 48 hours.

Organism	Growth	Gas	H ₂ S	Slant	Butt
<i>Escherichia coli</i> ATCC 25922 (00013*)	luxuriant	positive reaction	negative reaction, no blackening of medium	acidic reaction, yellowing of the medium	acidic reaction, yellowing of the medium
<i>Klebsiella aerogenes</i> ATCC 13048 (00175*)	luxuriant	positive reaction	negative reaction, no blackening of medium	acidic reaction, yellowing of the medium	acidic reaction, yellowing of the medium
<i>Citrobacter freundii</i> ATCC 8090	luxuriant	positive reaction	positive reaction, blackening of medium	acidic reaction, yellowing of the medium	acidic reaction, yellowing of the medium
<i>Proteus hauseri</i> ATCC 13315	luxuriant	negative reaction	positive reaction, blackening of medium	alkaline reaction, red colour of the medium	acidic reaction, yellowing of the medium
<i>Klebsiella pneumoniae</i> ATCC 13883 (00087*)	luxuriant	positive reaction	negative reaction, no blackening of medium	acidic reaction, yellowing of the medium	acidic reaction, yellowing of the medium
<i>Salmonella Paratyphi A</i> ATCC 9150	luxuriant	positive reaction	negative reaction, no blackening of medium	alkaline reaction, red colour of the medium	acidic reaction, yellowing of the medium

<i>Salmonella</i> Schottmuelleri ATCC 10719	luxuriant	positive reaction	positive reaction, blackening of medium	alkaline reaction, red colour of the medium	acidic reaction, yellowing of the medium
<i>Salmonella</i> Typhi ATCC 6539	luxuriant	negative reaction	positive reaction, blackening of medium	alkaline reaction, red colour of the medium	acidic reaction, yellowing of the medium
<i>Salmonella</i> Enteritidis ATCC 13076 (00030*)	luxuriant	positive reaction	positive reaction, blackening of medium	alkaline reaction, red colour of the medium	acidic reaction, yellowing of the medium
<i>Shigella flexneri</i> ATCC 12022 (00126*)	luxuriant	negative reaction	negative reaction,no blackening of medium	alkaline reaction, red colour of the medium	acidic reaction, yellowing of the medium
<i>Pseudomonas aeruginosa</i> ATCC 27853 (00025*)	luxuriant	negative reaction	negative reaction, blackening of medium	alkaline reaction, red colour of the medium	alkaline reaction,red colour of the medium
<i>Yersinia enterocolitica</i> ATCC 27729	luxuriant	variable reaction	negative reaction,no blackening of medium	alkaline reaction,red colour of the medium	acidic reaction, yellowing of the medium
<i>Enterobacter cloacae</i> ATCC 13047 (00083*)	luxuriant	positive reaction	negative reaction,no blackening of medium	acidic reaction, yellowing of the medium	acidic reaction, yellowing of the medium

Key :* Corresponding WDCM numbers

(#) Formerly known as *Enterobacter aerogenes*

Formerly known as *Proteus vulgaris*

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (10,11).

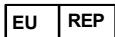
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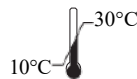
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In vitro diagnostic
medical device



CE Marking



Storage temperature



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MacConkey Agar w/ 0.15% Bile salts, CV and NaCl

M081

For the selective isolation and differentiation of coliform organisms and other enteric pathogens from clinical and non clinical samples.

Composition**

Ingredients	g / L
Gelatin peptone	17.000
Tryptone	1.500
Peptone	1.500
Lactose	10.000
Bile salts	1.500
Sodium chloride	5.000
Neutral red	0.030
Crystal violet	0.001
Agar	15.000
Final pH (at 25°C)	7.1±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 51.53 grams in 1000 ml purified/distilled water. Heat to boiling with gentle swirling to dissolve the agar completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Avoid overheating. Cool to 45-50°C. Mix well and pour into sterile Petri plates. The surface of the medium should be dry when inoculated.

Principle And Interpretation

MacConkey agars are slightly selective and differential plating media mainly used for the detection and isolation of gram-negative organisms from clinical (1), dairy (2), food (3,4), water (5), pharmaceutical (6,7) and industrial sources (8). It is also recommended for the selection and recovery of the *Enterobacteriaceae* and related enteric gram-negative bacilli. USP recommends this medium for use in the performance of Microbial Limit Tests (7).

These agar media are selective since the concentration of bile salts, which inhibit gram-positive microorganisms, is low in comparison with other enteric plating media. The medium M081, which corresponds with that recommended by APHA can be used for the direct plating of water samples for coliform bacilli, for the examination of food samples for food poisoning organisms (4) and for the isolation of *Salmonella* and *Shigella* species in cheese (2). Other than that this medium is also used for count of coli-aerogenes bacteria in cattle and sheep faeces (9), the count of coli-aerogenes and non-lactose fermenters in poultry carcasses (9), bacterial counts on irradiated canned minced chicken (10) and the recognition of coli-aerogenes bacteria during investigations on the genus *Aeromonas* (11,12).

MacConkey Agar is the earliest selective and differential medium for cultivation of enteric microorganisms from a variety of clinical specimens (13,14). The original medium contains protein, bile salts, sodium chloride and two dyes. The selective action of this medium is attributed to crystal violet and bile salts, which are inhibitory to most species of gram-positive bacteria. Gram-negative bacteria usually grow well on the medium and are differentiated by their ability to ferment lactose. Lactose-fermenting strains grow as red or pink colonies and may be surrounded by a zone of acid precipitated bile. The red colour is due to production of acid from lactose, absorption of neutral red and a subsequent colour change of the dye when the pH of medium falls below 6.8. Lactose non-fermenting strains, such as *Shigella* and *Salmonella* are colourless, transparent and typically do not alter appearance of the medium.

Peptone, Tryptone and gelatin peptone are sources of nitrogen, carbon, long chain amino acids and other nutrients. Lactose is a fermentable carbohydrate, Sodium chloride maintains the osmotic equilibrium. Bile salts and crystal violet are selective agents that inhibit growth of gram-positive organisms. Neutral red is the pH indicator dye.

Type of specimen

Clinical - faeces, urine etc., foodstuffs and dairy samples, water samples

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (1,15).

For food and dairy samples, follow appropriate techniques for sample collection and processing as per guidelines (2,4).

For water samples, follow appropriate techniques for sample collection, processing as per guidelines and local standards (5).

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic use. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling clinical specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. Though the medium is recommended for selective isolation, further biochemical and serological testing must be carried out for further confirmation.
2. The surface of the medium should be dry when inoculated.
3. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium.
4. Each lot of the medium has been tested for the organisms specified on the COA. It is recommended to users to validate the medium for any specific microorganism other than mentioned in the COA based on the user's unique requirement.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Light yellow to pink homogeneous free flowing powder

Gelling

Firm comparable with 1.5% Agar gel.

Colour and Clarity of prepared medium

Red with purplish tinge coloured clear to slightly opalescent gel forms in Petri plates.

Reaction

Reaction of 5.15% w/v aqueous solution at 25°C. pH : 7.1±0.2

pH

6.90-7.30

Cultural Response

Cultural response was observed after an incubation at 30-35°C for 18-72 hours. Recovery rate is considered as 100% for bacteria growth on Soybean Casein Digest Agar.

Organism	Inoculum (CFU)	Growth	Recovery	Colour of colony
<i>Corynebacterium diphtheriae</i> type gravis	≥10 ⁴	inhibited	0%	
<i>Shigella flexneri</i> ATCC 12022 (00126*)	50 -100	fair to good	30 -40 %	colourless
<i>Salmonella</i> Paratyphi A ATCC 9150	50 -100	luxuriant	≥50 %	colourless
<i>Salmonella</i> Abony NCTC 6017 (00029*)	50 -100	luxuriant	≥50 %	colourless
## <i>Proteus hauseri</i> ATCC 13315	50 -100	luxuriant	≥50 %	colourless
<i>Salmonella</i> Typhi ATCC 6539	50 -100	luxuriant	≥50 %	colourless
<i>Staphylococcus epidermidis</i> ATCC 12228 (00036*)	≥10 ⁴	inhibited	0%	
<i>Escherichia coli</i> ATCC 8739 (00012*)	50 -100	luxuriant	≥50 %	pink-red with bile precipitate

<i>Staphylococcus aureus</i> subsp.aureus ATCC 6538 (00032*)	>=10 ⁴	inhibited	0%	
<i>Salmonella</i> Paratyphi B ATCC 8759	50 -100	luxuriant	>=50 %	colourless
<i>Escherichia coli</i> ATCC 25922 (00013*)	50 -100	luxuriant	>=50 %	pink to red with bile precipitate
# <i>Klebsiella aerogenes</i> ATCC 13048 (00175*)	50 -100	luxuriant	>=50 %	pink to red
<i>Salmonella</i> Typhimurium ATCC 14028 (00031*)	50 -100	luxuriant	>=50 %	colourless
<i>Enterococcus faecalis</i> ATCC 29212 (00087*)	50 -100	none - poor	<=10 %	colourless to pale pink
<i>Salmonella</i> Enteritidis ATCC 13076 (00030*)	50 -100	luxuriant	>=50 %	colourless
<i>Staphylococcus aureus</i> subsp.aureus ATCC 25923 (00034*)	>=10 ⁴	inhibited	0%	

Key :- * Corresponding WDCM numbers, # Formerly known as *Enterobacter aerogenes*,
Formerly known as *Proteus vulgaris*.

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 20-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (1,15).

Reference

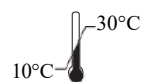
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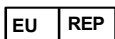
HiMedia Laboratories Pvt. Limited,
Plot No.C-40, Road No.21Y,
MIDC,WagleIndustrial Area,
Thane (W) -400604, MS, India



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Brilliant Green Bile Broth

M121I

Intended Use:

Recommended for isolation and cultivation of coliform organisms from cream, yogurt and raw milk. The composition and performance criteria of this medium are as per the specifications laid down in ISO 4831:2006, ISO 11133:2014 & Amd.2 :2020 (E).

Composition**

ISO Specifications : BGBLB

Ingredients	g / L
Enzymatic digest of casein	10.000
Lactose	10.000
Dehydrated Ox bile	20.000
Brilliant green	0.0133
Final pH (at 25°C)	7.2±0.2

Brilliant Green Bile Broth

M121I

Ingredients	g / L
Tryptone\$	10.000
Lactose monohydrate	10.000
Dehydrated bile	20.000
Brilliant green	0.0133
Final pH (at 25°C)	7.2±0.2

**Formula adjusted, standardized to suit performance parameters

\$ Equivalent to Enzymatic digest of casein

Directions

Suspend 39.51 gram (the equivalent weight of dehydrated medium per liter) in 1000 ml purified / distilled water. Heat if necessary to dissolve the medium completely. Dispense the medium in quantities of 10ml in test tubes of approximately 16mm x 160mm containing Durham tubes. Sterilize in an autoclave set at 121°C for 15 minutes. Cool to 45-50°C.

Note: The Durham tube shall not contain air bubbles after sterilization.

Principle And Interpretation

Brilliant Green Bile Broth is formulated as per ISO for confirmation of coliform bacteria (1,2) present in food samples or environmental samples in the area of food handling or food sampling.

Brilliant green and dehydrated bile present in the medium inhibit gram-positive bacteria including lactose fermenting *Clostridia* (3). Production of gas from lactose fermentation is detected by incorporating inverted Durham's tube, indicates a positive evidence of faecal coliforms since nonfaecal coliforms growing in this medium do not produce gas.

During examination of samples, growth from presumptive positive tubes showing gas in Lauryl Tryptose Broth (M080) is inoculated in Brilliant Green Bile Broth wherein gas formation within 48 ± 2 hours confirms the presumptive test (1). Gram-positive spore-formers may produce gas if the bile or brilliant green inhibition is weakened by food material.

Type of specimen

Food samples

Specimen Collection and Handling:

ISO 4831:2006 (1,2)

Depending on the limit of detection that is required, x ml of the test sample if liquid, or x ml of the initial suspension in the case of other products, is transferred to a tube containing 10 ml of double-strength selective enrichment medium. Incubate at 30°C or 37°C (as agreed) for $24 \text{ h} \pm 2 \text{ h}$, continue incubation for another $24 \text{ h} \pm 2 \text{ h}$ for gas formation. Gas formation is considered as positive.

Warning and Precautions :

Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium.
2. Further biochemical & serological identification is necessary for confirmation.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to pale green homogeneous free flowing powder

Colour and Clarity of prepared medium

Emerald green coloured, clear solution without any precipitate.

Reaction

Reaction of 3.95% w/v aqueous solution at 25°C. pH : 7.2±0.2

pH

7.00-7.40

Cultural Response

Productivity : Cultural characteristics observed after an incubation at 30±1°C for 24±2h to 48±2h.

Selectivity : Cultural characteristics observed after an incubation at 30±1°C for 24±2h to 48±2h.

Organism	Inoculum (CFU)	Growth	Gas
Productivity			
<i>Escherichia coli</i> ATCC 25922 (00013*)	50-100	good-luxuriant	positive reaction
<i>Escherichia coli</i> ATCC 8739 (00012*)	50-100	good-luxuriant	positive reaction
<i>Citrobacter freundii</i> ATCC 43864 (00006*)	50-100	good-luxuriant	positive reaction

Selectivity

<i>Enterococcus faecalis</i> ATCC 29212 (00087*)	50-100	none-poor	negative reaction
<i>Enterococcus faecalis</i> ATCC 19433 (00009*)	50-100	none-poor	negative reaction

Key : * - Corresponding WDCM numbers

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 15-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques (4,5).

Reference

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Columbia Blood Agar Base

M144

Intended Use:

For preparation of blood agar, chocolate agar and for preparation of various selective and identification media and isolation of organisms from clinical and non clinical samples.

Composition**

Ingredients	g / L
Peptone, special	23.000
Corn starch	1.000
Sodium chloride	5.000
Agar	15.000
Final pH (at 25°C)	7.3±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 44.0 grams of in 1000 ml purified/ distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C before adding heat sensitive compounds.

For Blood Agar: Add 5% v/v sterile defibrinated sheep blood to sterile cool base.

For Chocolate Agar: Add 10% v/v sterile defibrinated sheep blood to sterile cool base. Heat to 80°C for 10 minutes with constant agitation.

The medium can be made selective by adding different antimicrobials to sterile base.

For *Brucella* species: Add rehydrated contents of 1 vial of NPBCVN Selective Supplement (FD005) to 500 ml sterile molten base.

For *Campylobacter* species: Add rehydrated contents of 1 vial of Blaser-Wang Selective Supplement (FD006) or Butzler Selective Supplement (FD007) or Skirrow Selective Supplement (FD008) or VTCA Selective Supplement (FD090) or Butzler VI Selective Supplement (FD106) to 500 ml sterile molten base along with rehydrated contents of 1 vial of Minerals Growth Supplement (FD009) and 5-7% v/v horse or sheep blood.

For *Gardnerella* species: Add rehydrated contents of 1 vial of GNA Selective Supplement (FD056) to 500 ml sterile molten base.

For Cocci: Add rehydrated contents of 1 vial of NC Selective Supplement (FD030) or NNP Selective Supplement (FD031) or CO Selective Supplement (FD119) to 500 ml sterile molten base.

Principle And Interpretation

Columbia Blood Agar Base was devised by Ellner et al (1). This medium contains special peptone which supports rapid and luxuriant growth of fastidious and non-fastidious organisms. Also, this medium promotes typical colonial morphology; better pigment production and more sharply defined haemolytic reactions. Fildes found that Nutrient Agar supplemented with a digest of sheep blood supplied both of these factors and the medium would support the growth of *H. influenzae* (2,3). The inclusion of bacitracin makes the enriched Columbia Agar Medium selective for the isolation of *Haemophilus* species from clinical specimens, especially from upper respiratory tract (4). Columbia Agar Base is used as the base for the media containing blood and for selective media formulations in which different combinations of antimicrobial agents are used as additives.

Corn starch serves as an energy source and also neutralizes toxic metabolites. Sheep blood permits the detection of haemolysis and also provides heme (X factor) which is required for the growth of many bacteria. However it is devoid of V factor (Nicotinamide adenine dinucleotide) and hence *Haemophilus influenzae* which needs both the X and V factors, will not grow on this medium.

Columbia Agar Base with added sterile serum provides an efficient medium for *Corynebacterium diphtheriae* virulence test medium. After following the established technique for *C. diphtheriae*, lines of toxin-antitoxin precipitation are clearly visible in 48 hours. Many pathogens require carbon dioxide; therefore, plates may be incubated in an atmosphere containing approximately 3-10% CO₂.

Precaution: Brucella cultures are highly infective and must be handled carefully; incubate in 5-10% CO₂. Campylobacter species are best grown at 42°C in a micro aerophilic atmosphere. Plates with Gardnerella supplements plates should be incubated at 35°C for 48 hours containing 7% CO₂ (2).

Type of specimen

Clinical samples : throat swabs, pus.

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (5,6). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. Certain fastidious organisms like *Haemophilus influenzae* may not grow on the medium, blood supplementation may be required.
2. As this medium have a relatively high carbohydrate content, beta-hemolytic *Streptococci* may exhibit a greenish hemolytic reaction which may be mistaken for the alpha haemolysis.
3. Biochemical characterization is required on colonies of pure culture for complete identification.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder.

Gelling

Firm, comparable with 1.5% Agar gel.

Colour and Clarity of prepared medium

Basal medium: Light amber coloured clear to slightly opalescent gel.

After addition of 5%w/v sterile defibrinated blood : Cherry red coloured opaque gel forms in Petri plates.

Reaction

Reaction of 4.4% w/v aqueous solution at 25°C. pH : 7.3±0.2

pH

7.10-7.50

Cultural Response

Cultural characteristics observed with added 5% w/v sterile defibrinated blood, after an incubation at 35-37°C for 24-48 hours.

Organism	Inoculum (CFU)	Growth	Recovery	Haemolysis
<i>Neisseria meningitidis</i> ATCC 13090	50-100	luxuriant	≥70%	none
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC 25923 (00034*)	50-100	luxuriant	≥70%	beta / gamma
<i>Staphylococcus epidermidis</i> ATCC 12228 (00036*)	50-100	luxuriant	≥70%	gamma
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC 6538 (00032*)	50-100	luxuriant	≥70%	beta / gamma
<i>Streptococcus pneumoniae</i> ATCC 6303	50-100	luxuriant	≥70%	alpha
<i>Streptococcus pyogenes</i> ATCC 19615	50-100	luxuriant	≥70%	beta
<i>Clostridium sporogenes</i> ATCC 19404 (00008*)	50-100	luxuriant	≥50 %	
<i>Clostridium sporogenes</i> ATCC 11437	50-100	luxuriant	≥50 %	
<i>Clostridium perfringens</i> ATCC 13124 (00007*)	50-100	luxuriant	≥50 %	
<i>Clostridium perfringens</i> ATCC 12934	50-100	luxuriant	≥50 %	

Key : (*) Corresponding WDCM numbers.

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (5,6).

Reference

1. Ellner P. P., Stoessel C. J., Drakeford E. and Vasi F., 1966, Am. J. Clin. Pathol., 45:502.
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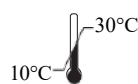
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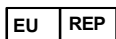
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Plot No.C-40, Road No.21Y,
MIDC,WagleIndustrial Area,
Thane (W) -400604, MS, India



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Mueller Hinton Agar

M173

Intended Use:

Recommended for determination of susceptibility of microorganisms to antimicrobial agents isolated from clinical samples.

Composition**

Ingredients	g / L
HM infusion solids B # (from 300g)	2.000
Acicase ##	17.500
Starch	1.500
Agar	17.000
Final pH (at 25°C)	7.3±0.1

**Formula adjusted, standardized to suit performance parameters

- Equivalent to Beef heart infusion

- Equivalent to Casein acid hydrolysate

Directions

Suspend 38.0 grams in 1000 ml purified/ distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Mix well and pour into sterile Petri plates. Note: The performance of this batch has been tested and standardised as per the current CLSI (formerly, NCCLS) document M6-protocols for Evaluating Dehydrated Mueller Hinton Agar.

Principle And Interpretation

The Mueller Hinton formulation was originally developed as a simple, transparent agar medium for the cultivation of pathogenic *Neisseria* species (1). Other media were subsequently developed that replaced the use of Mueller Hinton Agar for the cultivation of pathogenic *Neisseria* species, but it became widely used in the determination of sulfonamide resistance of gonococci and other organisms. Mueller Hinton Agar is now used as a test medium for antimicrobial susceptibility testing (2). Mueller Hinton Agar is recommended for the diffusion of antimicrobial agents impregnated on paper disc through an agar gel as described in CLSI Approved Standard (3). Mueller Hinton Agar has been selected by the CLSI for several reasons:

- It demonstrates good batch-to-batch reproducibility for susceptible testing.
- It is low in sulfonamide, trimethoprim and tetracycline inhibitors.
- It supports the growth of most non-fastidious bacterial pathogens and
- Many data and much experience regarding its performance have been recorded (4).

Kirby-Bauer et al recommended this medium for performing antibiotic susceptibility tests using a single disc of high concentration (5). WHO Committee on Standardization of Susceptibility Testing has accepted Mueller Hinton Agar for determining the susceptibility of microorganisms because of its reproducibility (6). Mueller Hinton Agar with 5% sheep blood and Mueller Hinton Agar with Hemoglobin have been recommended for antimicrobial susceptibility testing of *Streptococcus pneumoniae* and *Haemophilus influenzae*.

HM infusion B from and acicase provide nitrogenous compounds, carbon, sulphur and other essential nutrients. Starch acts as a protective colloid against toxic substances present in the medium. Starch hydrolysis yields dextrose, which serves as a source of energy. These ingredients are selected for low thymine and thymidine content as determined by MIC values for *Enterococcus faecalis* with sulfamethoxazole trimethoprim (SXT).

The Kirby-Bauer procedure is based on agar diffusion of antimicrobial substances impregnated on paper discs. This method employs disc with a single concentration of antimicrobial agent and the zone diameters observed are correlated with minimum inhibitory concentration (MIC) values (7,1,2). A standardized suspension of the organism is swabbed over the entire surface of the medium.

Paper discs impregnated with specific amounts of antimicrobial agents are then placed on the surface of the medium, incubated and zones of inhibition around each disc are measured. The susceptibility is determined by comparing with CLSI standards (4). The various factors, which influence disc diffusion susceptibility tests, are agar depth, disc potency, inoculum concentration, pH of the medium and beta-lactamase production by test organisms (4,8).

Mueller Hinton Agar is not appropriate for assay by disc diffusion method with slow growing organisms, anaerobes and

capnophiles. With slow growing organisms, increased incubation may cause deterioration of diffusing antibiotic and produce unprecise readings (9). Mueller Hinton Agar is recommended for the diffusion of antimicrobial agents impregnated on paper disc through an agar gel as described in NCCLS (National Committee for Clinical Laboratory Standards), now CLSI (Clinical and Laboratory Standards Institute) Approved Standard (10).

Type of specimen

Clinical samples : Pure cultures isolated from urine , stool, blood etc.

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (2,10-13).

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. This medium is recommended for susceptibility testing of pure cultures only.
2. Inoculum density may affect the zone size. Heavy inoculum may result in smaller zones or too less inoculum may result in bigger zones.
3. Fastidious organisms may not grow on this medium and may require supplementation of blood.
4. Fastidious anaerobes may not grow on this medium.
5. As antimicrobial susceptibility is carried with antibiotic disc, proper storage of the disc is desired which may affect the potency of the disc.
6. Under certain circumstances, the in vitro results of antibiotic susceptibility may not show the same in vivo.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Gelling

Firm, comparable with 1.7% agar gel.

Colour and Clarity of prepared medium

Light amber coloured clear to slightly opalescent gel forms in Petri plates

Reaction

Reaction of 3.8% w/v aqueous solution at 25°C. pH : 7.3±0.1

pH

7.20-7.40

Cultural Response

Antibiotic susceptibility tests are performed in accordance with, and meet the acceptance limits of the current ISO/TS 16782 (15). Performance of the medium is checked in accordance with the CLSI/ EUCAST guidelines.

For testing *S. pneumoniae* : The medium was supplemented with 5% Horse blood and 20 mg/l NAD , incubated at 34-36°C for 18-20 hours in 5% CO₂ .

For testing *H. influenzae* : The medium was supplemented with 5% Horse blood and 20 mg/l -NAD, incubated at 34-36°C for 18-20 hours in 5% CO₂ .

Antibiotic Sensitivity test

Various discs were tested for standard ATCC strains and zone of inhibition were measured after an incubation 30-35°C for 18 hours. (As per the latest CLSI Protocol M6 & Standards as per the current CLSI M100).

Thymine/Thymidine Content

The zones for these discs are indicative of the Thymine/Thymidine content of the medium.

Divalent Cation Content

\$ The zones for these discs are indicative of the Divalent Cation content of the medium

Organism	Growth	Standard Zone	Incubation temperature	Incubation period
<i>Escherichia coli</i> ATCC 25922 (00013*)	luxuriant		34-36°C	16-20 hours
Cephalothin CEP 30mcg		15-21 mm		
Ampicillin AMP 10mcg		15-22 mm		
Chloramphenicol C 30 mcg		21-27 mm		
Gentamicin GEN 10mcg		19-26 mm		
Co-Trimoxazole (Sulpha/ Trimethoprim) (COT) 25 mcg		23-29 mm		
Sulphafurazole SF 300 mcg		15-23 mm		
Cefotaxime CTX 5 mcg		25-31 mm		
Tigecycline TGC 15mcg		20-27 mm		
Tetracycline TE 30 mcg		18-25 mm		
Amoxicillin- clavulanate AMC 30 mcg		18-24 mm		
Ciprofloxacin CIP 5mcg		29-38 mm		
<i>Escherichia coli</i> ATCC 35218	luxuriant		34-36°C	16-20 hours
Amoxicillin- clavulanate AMC 30 mcg		17-22 mm		
Piperacillin/Tazobactam PIT 100/10 mcg		24-30 mm		
Ticarcillin TI 75 mcg		6 mm		
Ticarcillin/Clavulanic acid TCC 75/10mcg		21-25mm		
Ampicillin AMP 10 mcg		6 mm		
Ampicillin/Sulbactam A/S 10/10 mcg		13-19 mm		
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC 25923 (00034*)	luxuriant		34-36°C	16-20 hours
Erythromycin E 15 mcg		22-30 mm		
Linezolid LZ 30 mcg		24-30 mm		
Tetracycline TE 30 mcg		24-30 mm		
Ciprofloxacin CIP 5mcg		22-30 mm		
Amoxyclav(Amoxicillin/ Clavulanic acid) AMC 30 mcg		28-36 mm		
Co-Trimoxazole COT 25 mcg		24-32 mm		
Cefoxitin CX 30 mcg		23-29 mm		
Oxacillin OX 1mcg		18-24 mm		
Pristinomycin RP 15 mcg		21-28 mm		
Gentamicin GEN 10 mcg		19-27 mm		
Penicillin-G 10 units		26-37 mm		
Ampicillin/Sulbactam A/S 10/10 mcg		29-37 mm		
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC 29213 (00131*)	luxuriant		34-36°C	16-20 hours
Penicillin-G P 1 unit		12-18 mm		
Cefoxitin CX 30 mcg		24-30 mm		
Erythromycin E 15 mcg		23-29 mm		
Linezolid LZ 10 mcg		21-27 mm		
Gentamicin GEN 10 mcg		19-25 mm		
Tetracycline TE 30 mcg \$		23-31 mm		
Ciprofloxacin CIP 5mcg		21-27 mm		

<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC 43300 (MRSA) (00211*)	luxuriant	34-36°C	24 hours
Oxacillin OX 1 mcg	Very Hazy to No Zone		
Cefoxitin CX 30 mcg	<=21 mm		
<i>Pseudomonas aeruginosa</i> ATCC 27853 (00025*)	luxuriant	34-36°C	16-20 hours
Ceftazidime CAZ 30 mcg	22-29 mm		
Ciprofloxacin CIP 5mcg	25-33 mm		
Tobramycin TOB 10 mcg \$	20-26 mm		
Amikacin AK 30 mcg \$	20-26 mm		
Aztreonam AT 3mcg	23-29 mm		
Cephotaxime CTX 30 mcg	18-22 mm		
Gentamicin GEN 10 mcg \$	17-23 mm		
Imipenem IPM 10 mcg	20-28 mm		
Piperacillin PI 100 mcg	25-33 mm		
Piperacillin Tazobactam PIT 30/6 mcg	23-29 mm		
<i>Enterococcus faecalis</i> ATCC 29212 (00087*)	luxuriant	34-36°C	16-20 hours
Trimethoprim TR 5 mcg #	24-32 mm		
Ampicillin AMP 2 mcg	15-21 mm		
Imipenem IPM 10 mcg	24-30 mm		
Linezolid LZ 10 mcg	19-25 mm		
Nitrofurantoin NIT 100 mcg	18-24 mm		
Co-Trimoxazole (Sulpha/ Trimethoprim) (COT) 25 mcg	26-34 mm		
Vancomycin VA 5 mcg	10-16 mm		
<i>Enterococcus faecalis</i> ATCC33186 (00210*)	luxuriant	34-36°C	16-20 hours
Co-Trimoxazole (Sulpha/ Trimethoprim) (COT) 25 mcg	>=20 mm		
<i>Streptococcus pneumoniae</i> ATCC 49619	luxuriant	34-36°C	18-20 hours
Vancomycin VA 5 mcg	17-23 mm		
<i>Haemophilus influenzae</i> ATCC 49247	luxuriant	34-36°C	18-20 hours
Ampicillin AMP 2 mcg	6-12 mm		
<i>Haemophilus influenzae</i> ATCC 49766	luxuriant	34-36°C	18-20 hours
Cefixime CFM 5 mcg	29-35 mm		

Key : *Corresponding WDCM numbers.

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 20-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (3,5).

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- 1.Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and Tenover F. C., (Ed.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.
- 2.National Committee for Clinical Laboratory Standards, 2000, Approved Standard: M7-A5. Methods for Dilution Antimicrobial Susceptibility Tests for Bacteria that grow aerobically, 5th Ed., NCCLS, Wayne, Pa.
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- 11.ISO/TS 16782:2016, Confirmed in 2021 Clinical laboratory testing - Criteria for acceptable lots of dehydrated Mueller-Hinton agar and broth for antimicrobial susceptibility testing
- 12.European Committee on Antimicrobial Susceptibility Testing Breakpoint tables for interpretation of MICs and zone diameters Version 14.0, valid from 2024-01-01.
- 13.European Committee on Antimicrobial Susceptibility Testing Routine and extended internal quality control as recommended by EUCAST Version 14.0, valid from 2024-01-01.

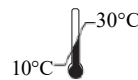
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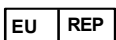
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MIDC,WagleIndustrial Area,
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SIM Motility Medium, Modified

M181F

SIM Medium is recommended for determination of hydrogen sulphide production, indole formation and motility of enteric bacilli in accordance with FDA BAM.

Composition**

Ingredients	Gms / Litre
Pancreatic digest of casein	20.000
Peptic digest of animal tissue	6.100
Ferrous ammonium sulfate	0.200
Sodium thiosulfate	0.200
Agar	3.500
Final pH (at 25°C)	7.3±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 30.0 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Dispense in tubes. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Allow the tubes to cool in an upright position.

Principle And Interpretation

SIM Medium is recommended by FDA BAM, 1998 (1) to differentiate enteric bacilli particularly *Salmonella* and *Shigella* on the basis of sulphide production, indole formation and motility (2). Jordan and Victorson (3) reported that *Salmonella* Paratyphi A and Paratyphi B can be distinguished on the basis of H₂S production using lead acetate. Sulkin and Willett (4) used Triple Sugar Iron Agar with 1% agar for motility along with H₂S production and carbohydrate fermentation. Sosa (5) described a peptone medium with low agar for motility and indole determination.

Motility, indole and sulphide production tests are used to differentiate *Enterobacteriaceae* members. SIM Medium combines these three differential characteristics in a single medium. Peptonized iron and sodium thiosulphate are the indicators of H₂S production. This H₂S reacts with peptonized iron to form black precipitate of ferrous sulphide. *Salmonella* are H₂S positive and *Shigella* are H₂S negative. Motile organisms intensify the H₂S reaction. Motile organisms grow away from line of inoculation showing diffused growth while non-motile organisms grow along the stabline. Motility detection is possible due to the semisolid nature of the medium. *Salmonella* is motile while *Shigella* are non motile. Tryptophan, from peptic digest of animal tissue, is degraded by specific bacteria to produce indole. The indole is detected by the addition of chemical reagents following the incubation period.

Inoculate fresh culture with a single stab using straight needle through the center of the medium. Following incubation, observe for motility (diffuse growth outward from the stabline or turbidity throughout the medium) and for H₂S production (blackening of the medium). To detect indole production, add three or four drops of Kovacs reagent and observe for development of red color (positive reaction). Determine motility and H₂S production prior to determination of indole production.

Quality Control

Appearance

Cream to beige homogeneous free flowing powder

Gelling

Semisolid, comparable with 0.3% Agar gel.

Colour and Clarity of prepared medium

Medium amber coloured slightly opalescent gel forms in tubes as butts

Reaction

Reaction of 3.0% w/v aqueous solution at 25°C. pH : 7.3±0.2

pH

7.10-7.50

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Cultural Response

Organism	Inoculum (CFU)	Growth	Motility	Indole production (on addition of Kovac's)	H2S
Cultural Response <i>Escherichia coli</i> ATCC 25922	50-100	luxuriant	positive, growth away from stabline causing turbidity	positive reaction, red ring at the interface of the medium	negative reaction
<i>Salmonella Typhimurium</i> ATCC 14028	50-100	luxuriant	positive, growth away from stabline causing turbidity	negative reaction	positive reaction, blackening of medium
<i>Shigella flexneri</i> ATCC 12022	50-100	luxuriant	negative, growth along the stabline, surrounding medium remains clear	negative reaction	negative reaction
<i>Salmonella Paratyphi A</i> ATCC 9150	50-100	luxuriant	positive, growth away from stabline causing turbidity	negative reaction	Negative reaction
<i>Salmonella Paratyphi B</i> ATCC 8739	50-100	luxuriant	positive, growth away from stabline causing turbidity	Negative reaction	Positive reaction, blackening of medium
<i>Klebsiella pneumoniae</i> ATCC 13883	50-100	luxuriant	negative, growth along the stabline, surrounding medium remains clear	Negative reaction	Negative reaction

Storage and Shelf Life

Store below 30°C in tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label.

Reference

- 1.FDA, U.S. 1998. Bacteriological Analytical Manual. 8 ed. Gaithersburg, MD: AOAC International.
- 2.MacFaddin, J. F. 1985. Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria vol. 1. Baltimore: Williams and Wilkins.
- 3.Jordan, E. O. and Victorson, R 1917. J. Inf. Dis, 21.
- 4.Sulkin, S. E. and Willett, J. C 1940. J. Lab. Clin. Med., 25.
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Tinsdale Agar Base

M314

Intended Use:

Recommended for selective isolation and differentiation of *Corynebacterium diphtheriae*.

Composition**

Ingredients	g / L
Peptone	20.000
Sodium chloride	5.000
L-Cystine	0.240
Sodium thiosulphate	0.430
Agar	15.000
Final pH (at 25°C)	7.4±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 40.67 grams in 1000 ml purified/distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C and aseptically add Tinsdale Selective Supplement (FD073, Part A and Part B). Mix well and pour into sterile Petri plates.

Principle And Interpretation

The Corynebacteria are gram-positive, non-sporulating, non-motile rods. They are often club-shaped and frequently beaded or beaded with irregularly stained granules. These bacteria are generally aerobic or facultative, but microaerophilic species do occur. *Corynebacterium diphtheriae* produces a powerful exotoxin that causes diphtheria in humans. In nature, *C.diphtheriae* occurs in nasopharyngeal area of infected persons or healthy carriers.

The three biotypes of *C.diphtheriae* are mitis, intermedius and gravis (1). The signs and symptoms of diphtheria are sore throat, malaise, headache and nausea (2). Tinsdale Agar Base Medium was developed by Tinsdale (3,4) for the selective isolation and differentiation of *C.diphtheriae* from diphtheroids. This medium was modified by Billings (2), which improved the recovery and differential qualities of *C.diphtheriae*. The present medium is according to the modified Billings Medium. Moore and Parsons (3) confirmed the halo formation as a characteristic property of *C.diphtheria* with the exception of *C.ulcerans*, which forms colony with similar features as *C.diphtheriae*.

Peptone provides nitrogenous compounds. L-cystine and sodium thiosulphate form the H₂S indicator system. Potassium tellurite from the supplement inhibits all gram-negative bacteria and most of the upper respiratory tract normal flora.

C.diphtheriae forms grayish black colonies surrounded by a dark brown halo while diphtheroids commonly found in the upper respiratory tract do not form such colonies. Dark brown halo around the colony is due to H₂S production from cystine combining with the tellurite salt. Moore and Parsons (3) found Tinsdale Medium as an ideal medium for the routine cultivation and isolation of *C.diphtheriae*. They also confirmed the stability of halo formation on clear medium and its specificity for *C.diphtheriae* and *C.ulcerans*. *C.ulcerans* found in nasopharynx form colonies same as *C.diphtheriae* and require further biochemical confirmation (5).

Do not incubate the plates in 5-10% CO₂ as it retards the development of characteristic halos (6). Tinsdale Agar is not suitable as a primary plating medium, since it may not support the growth of some strains of *C.diphtheriae* (1). *C.ulcerans*, *C.pseudotuberculosis* and (rarely) *Staphylococcus* species may produce a characteristic halo on Tinsdale Agar (1). Several organisms may exhibit slight browning on Tinsdale Agar in 18 hours; therefore the plates should be read after complete incubation period (48 hours) (1).

Type of specimen

Clinical samples - Throat swab

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (7,8).

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

In Vitro diagnostic Use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. Do not incubate the plates in 5-10% CO₂ as it retards the development of characteristic halos (6).

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Gelling

Firm, comparable with 1.5% Agar gel

Colour and Clarity of prepared medium

Light amber coloured clear to slightly opalescent gel forms in Petri plates

Reaction

Reaction of 4.07% w/v aqueous solution at 25°C. pH : 7.4±0.2

pH

7.20-7.60

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 40-48 hours with added Tinsdale Selective Supplement (FD073, Part A and Part B).

Organism	Inoculum (CFU)	Growth	Recovery	Colony characteristics
<i>Corynebacterium diphtheriae type gravis</i>	50-100	good-luxuriant	≥50%	brown-black with halo
<i>Corynebacterium diphtheriae type intermedium</i>	50-100	good-luxuriant	≥50%	brown-black with halo
<i>Corynebacterium diphtheriae type mitis</i>	50-100	good-luxuriant	≥50%	brown-black with halo
<i>Klebsiella pneumoniae</i> ATCC 13883 (00097*)	≥10 ⁴	inhibited	0 %	
<i>Streptococcus pyogenes</i> ATCC 19615	50-100	good	40-50%	black pin point, without halo

Key : *Corresponding WDCM numbers.

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (7,8).

Reference

1. Isenberg, (Eds.), 1992, Clinical Microbiology Procedures Handbook, Vol. 1, American Society for Microbiology, Washington, D.C.
2. Billings E., 1956, An investigation of Tinsdale Tellurite Medium: its usefulness and mechanisms of halo-formation, M.S. thesis, University of Michigan, Ann Arbor, Mich.
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6. Murray P. R., Baron E. J., Jorgensen J. H., Pfaller M. A., Tenover F. C., Tenover F. C., (Eds.), 8th Ed., 2003, Manual of Clinical Microbiology, ASM, Washington, D.C
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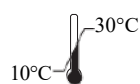
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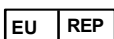
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Decarboxylase Broth Base, Moeller (Moeller Decarboxylase Broth Base)

M393

Intended Use:

Recommended to differentiate bacteria from clinical and non-clinical samples on the basis of their ability to decarboxylate the amino acid.

Composition**

Ingredients	g / L
Peptone	5.000
HM peptone B	5.000
Dextrose (Glucose)	0.500
Bromocresol purple	0.010
Cresol red	0.005
Pyridoxal	0.005
Final pH (at 25°C)	6.0±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 10.52 grams in 1000 ml purified / distilled water. Add 10 gm. of L-Lysine, L-Arginine, L-Ornithine or other L-amino acids. When using DL-amino acids, use 2% concentration. Heat if necessary to dissolve the medium completely. When L-Ornithine is added, readjustment of the pH is required. Dispense in 5 ml amount in screw-capped tubes and sterilize by autoclaving at 15 lbs pressure (121°C) for 10 minutes.

Principle And Interpretation

Moeller Decarboxylase Broth Base is used for differentiating gram-negative enteric bacilli on the basis of their ability to decarboxylate amino acids. Moeller introduced the Decarboxylase Broth for detecting the production of lysine and ornithine decarboxylase and arginine dihydrolase (1). Prior to Moellers work, bacterial amino acid decarboxylases were studied by Gale (2) and Gale and Epps (3). Production of ornithine decarboxylase is a helpful criterion in differentiating *Klebsiella* and *Enterobacter* species. *Klebsiella* are nonmotile and do not produce ornithine decarboxylase while *Enterobacter* are motile and produce ornithine decarboxylase except *Enterobacter agglomerans* (4).

This medium contains HM peptone B and peptone which provides nitrogenous and carbonaceous compounds, long chain amino acids and other essential nutrients for the growth of bacteria. Dextrose is the fermentable carbohydrate and pyridoxal is the co-factor for the decarboxylase enzyme. Bromo cresol purple and cresol red are the pH indicators in this medium. When the medium is inoculated with the dextrose fermenting bacteria, the pH is lowered due to acid production, which changes the colour of the indicator from purple to yellow. Acid produced stimulates decarboxylase enzyme. Decarboxylation of lysine yields cadaverine while putrescine is produced due to ornithine decarboxylation. Arginine is first hydrolyzed to ornithine which is then decarboxylated to form putrescine. Formation of these amines increases the pH of the medium, changing the colour of the indicator from yellow to purple. If the organisms do not produce the appropriate enzyme, the medium remains acidic, yellow in colour. Each isolate to be tested should also be inoculated into Moeller Decarboxylase Broth Base medium tube lacking the amino acid.

Inoculated tubes must be protected from air with a layer of sterile mineral oil. Exposure to air may cause alkalization at the surface of the medium which makes the test invalid.

Type of specimen

Clinical samples - Blood ; Food and dairy samples; Water samples

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (5,6).

For food and dairy samples, follow appropriate techniques for sample collection and processing as per guidelines (7,8,9).

For water samples, follow appropriate techniques for sample collection, processing as per guidelines and local standards.

(10) After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

In Vitro diagnostic Use. For professional use only. Read the label before opening the container. Wear protective gloves/ protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. Some fastidious organisms may show delayed reaction.
2. Overlaying with mineral oil is essential for appropriate results.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Light yellow to greenish yellow homogeneous free flowing powder

Colour and Clarity of prepared medium

Purple coloured, clear solution without any precipitate in tubes

Reaction

Reaction of 1.05% w/v aqueous solution at 25°C. pH : 6.0±0.2

pH

5.80-6.20

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for upto 4 days with addition of appropriate amino acids and overlaying with sterile mineral oil.

Organism	Arginine decarboxylation	Ornithine decarboxylation	Lysine decarboxylation
<i>Citrobacter freundii</i> ATCC 8090	variable reaction	variable reaction	negative reaction, yellow colour
# <i>Klebsiella aerogenes</i> ATCC 13048 (00175*)	negative reaction, yellow colour	positive reaction, purple colour	positive reaction, purple colour
<i>Escherichia coli</i> ATCC 25922 (00013*)	variable reaction	variable reaction	positive reaction, purple colour
<i>Klebsiella pneumoniae</i> ATCC 13883 (00097*)	negative reaction, yellow colour	negative reaction, yellow colour	positive reaction, purple colour
<i>Proteus mirabilis</i> ATCC 25933	negative reaction, yellow colour	positive reaction, purple colour	negative reaction, yellow colour
## <i>Proteus hauseri</i> ATCC 13315	negative reaction, yellow colour	negative reaction, yellow colour	negative reaction, yellow colour
<i>Salmonella Paratyphi A</i> ATCC 9150	delayed positive reaction/positive reaction, purple colour	positive reaction, purple colour	negative reaction, yellow colour

<i>Salmonella</i> Typhi ATCC 6539	delayed positive reaction / negative reaction	negative reaction, yellow colour	positive reaction, purple colour
<i>Serratia marcescens</i> ATCC 8100	negative reaction, yellow colour	positive reaction, purple colour	positive reaction, purple colour
<i>Shigella dysenteriae</i> ATCC 13313	negative reaction/ delayed positive reaction	negative reaction, yellow colour	negative reaction, yellow colour
<i>Shigella flexneri</i> ATCC 12022 (00126*)	negative reaction/ delayed positive reaction	negative reaction, yellow colour	negative reaction, yellow colour
<i>Shigella sonnei</i> ATCC 25931	variable reaction	positive reaction, purple colour	negative reaction, yellow colour

Key : (*) Corresponding WDCM numbers.

(#) Formerly known as *Enterobacter aerogenes*

Formerly known as *Proteus vulgaris*

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 15-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (5,6).

Reference

1. Moeller V., 1955, Acta Pathol. Microbiol. Scand. 36:158.
2. Gale G. F., 1940, Biochem. J., 34:392.
3. Gale and Epps, 1943, Nature, 152:327.
4. MacFaddin J., 1980, Biochemical Tests for Identification of Medical Bacteria, 2nd ed., Williams and Wilkins, Baltimore.
5. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
6. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
7. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
8. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.
9. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed., APHA Inc., Washington, D.C.
10. Lipps WC, Braun-Howland EB, Baxter TE, eds. Standard methods for the Examination of Water and Wastewater, 24th ed. Washington DC:APHA Press; 2023.

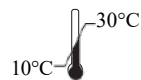
Revision : 06/2026



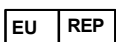
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Thane (W) -400604, MS, India



**In vitro diagnostic
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Enterococcus Confirmatory Broth

M394

Intended Use:

Recommended for confirming the presence of Enterococci in water supplies and other sources.

Composition**

Ingredients	Gms / Litre
Tryptone	5.000
Yeast extract	5.000
Dextrose (Glucose)	5.000
Sodium azide	0.400
Sodium chloride	65.000
Methylene blue	0.010
Final pH (at 25°C)	8.0±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 80.41 grams in 1000 ml purified / distilled water. Heat if necessary to dissolve the medium completely. Dispense in 100 ml quantities in tubes and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to room temperature and add 65 units of Penicillin to each 100 ml of broth prior to use.

Principle And Interpretation

Enterococcus Confirmatory Broth is formulated by Sandholzer and Winter (4) for the detection of Enterococci in water supplies, swimming pools, sewage etc. Enterococcus Confirmatory Broth has the same formula as Enterococcus Confirmatory Agar (M392) except agar, sodium chloride and Penicillin, which is used to detect Enterococci from crabmeat and oysters etc. Enterococci are differentiated from other Streptococci by their ability to grow in 6.5% sodium chloride, at pH 9.6 and at 10°C and 45°C (1).

Tryptone, yeast extract, dextrose provide nitrogenous and carbonaceous compounds, long chain amino acids and other essential growth nutrients for Enterococci. Sodium azide inhibits gram-negative organisms. Penicillin has inhibitory effect on Staphylococci. The positive presumptive tests are confirmed by inoculating from Enterococcus Presumptive Broth (M419) to Enterococcus Confirmatory slant-broth combination prepared with an Azide Agar medium (Enterococcus Confirmatory Agar, M392) overlaid with a Salt Azide Penicillin Broth (Enterococcus Confirmatory Broth, M394). A negative catalase test is considered confirmed positive evidence of the presence of Enterococci. Single strength medium can be used for small inoculum. Production of acid and turbidity in an azide presumptive broth when incubated at 45°C is considered positive presumptive evidence for the presence of Enterococci which is confirmed by inoculating in / on Confirmatory Broth (M394).

Type of specimen

Water samples

Specimen Collection and Handling

For water samples, follow appropriate techniques for sample collection, processing as per guidelines and local standards.

(1) After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. Further biochemical and serological tests must be carried out for further identification.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to yellow may have slight green tinge homogeneous free flowing powder

Colour and Clarity of prepared medium

Yellow coloured, clear solution which acquires greenish tinge at the surface on standing

Reaction

Reaction of 8.04% w/v aqueous solution at 25°C. pH : 8.0±0.2

pH

7.80-8.20

Cultural Response

Cultural characteristics observed after an incubation at 45°C for 18-24 hours .

Organism	Inoculum (CFU)	Growth
<i>Escherichia coli</i> ATCC 25922 (00013*)	≥10 ⁴	inhibited
<i>Enterococcus faecalis</i> ATCC 29212 (00087*)		good-luxuriant

Key : (*) Corresponding WDCM numbers.

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 15-25°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques (2,3).

Reference

1. Baird R.B., Eaton A.D., and Rice E.W., (Eds.), 2015, Standard Methods for the Examination of Water and Wastewater, 23rd ed., APHA, Washington, D.C.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
4. Sandholzer and Winter, 1946, Commercial Fisheries Leaflet T1a

Revision : 03/ 2020

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Thayer Martin Medium Base

M413

Intended use

Recommended for selective isolation of Gonococci from pathological specimens.

Composition**

Ingredients	g / L
Peptone, special	23.000
Starch	1.000
Sodium chloride	5.000
Agar	13.000
Final pH (at 25°C)	7.0±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 21.0 grams in 450 ml purified / distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Aseptically add 50 ml of sterile lysed blood and rehydrated contents of one vial of Vitamino Growth Supplement (FD025) and V.C.N Supplement (FD023) or V.C.N.T Supplement (FD024). If desired GC Supplement with Antibiotics (FD021) can be used as a single supplement. Mix well before pouring into sterile Petri plates. If FO Growth Supplement (FD022) is used suspend 21.0 grams of Thayer Martin Medium Base in 250 ml distilled water. Heat to boiling to dissolve the medium completely. Prepare 250 ml of 2% FO Growth Supplement solution. Sterilize separately by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Mix both and add the supplements as above.

Principle And Interpretation

Carpenter and Morton reported an improved medium to isolate Gonococci in 24 hours (1). Later on the efficiency of GC medium supplemented with haemoglobin and yeast concentrate was demonstrated for isolating gonococci (2). Subsequently Thayer and Martin Medium was developed for the primary isolation of *Neisseria gonorrhoeae* and *Neisseria meningitidis* from specimens containing mixed flora collected from throat, vagina, rectum and urethra (3,4). Thayer and Martin (4) used Vancomycin, Colistin and Nystatin. Martin and Lester (5) used an additional antibiotic Trimethoprim to make the medium selective.

Special peptone provides nutrients to the organisms while starch neutralizes the toxic fatty acids if present in the agar. FO Growth Supplement provides the X factor whereas the V factor (N.A.D.) is provided by the added supplement. Supplement (FD025) also supplies vitamins, amino acids, coenzymes etc. which enhances the growth of pathogenic *Neisseria*. Vancomycin and colistin inhibits gram-positive and gram-negative bacteria respectively (6). Nystatin inhibits fungi. This medium may inhibit *Haemophilus* species. Some strains of *Capnocytophaga* species may grow on this medium when inoculated with oropharyngeal specimens.

Type of specimen

Clinical samples : Throat, vaginal secretions, rectum, urethra, etc.

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (4,5).

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

In Vitro diagnostic Use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. Due to nutritional variations and fastidious nature of organisms certain strains may show poor growth.
2. Some strains of *Capnocytophaga* species may grow on this medium when inoculated with oropharyngeal specimens.
3. Further biochemical identification is necessary for confirmation.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within expiry period when stored at the recommended temperature.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Gelling

Firm, comparable with 1.3% Agar gel.

Colour and Clarity of prepared medium

Basal Medium : Yellow coloured clear to slightly opalescent gel. After addition of FO Growth Supplement or sterile lysed blood and supplements: chocolate coloured opaque gel forms in Petri plates.

Reaction

Reaction of 4.2% w/v aqueous solution at 25°C. pH : 7.0±0.2

pH

6.80-7.20

Cultural Response

Cultural characteristics observed with added sterile FO Growth Supplement (FD022), Vitamino Growth Supplement (FD025) and V.C.N. Supplement (FD023)/V.C.N.T. Supplement (FD024) after an incubation at 35-37°C for 18-48 hours.

Organism	Inoculum (CFU)	Growth	Recovery	Colour of colony
<i>Escherichia coli</i> ATCC 25922 (00013*)	≥10 ⁴	inhibited	0%	
<i>Neisseria gonorrhoeae</i> ATCC 19424	50-100	good-luxuriant	≥50%	small, grayish-white to colourless, mucoid
<i>Neisseria meningitidis</i> ATCC 13090	50-100	good-luxuriant	≥50%	medium to large, blue-gray, mucoid
<i>Proteus mirabilis</i> ATCC 25933	≥10 ⁴	inhibited	0%	

Key : *Corresponding WDCM numbers.

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (7,8).

Reference

1. Carpenter and Morton, 1947, Proc. N.Y. State Assoc. Public Hlth. Labs., 27:58.
2. Carpenter et al, 1949, Am. J. Syphil. Gonorrh. Vener. Dis., 33:164.
3. Martin, Billings, Hackney and Thayer, 1967, Public Hlth. Rep., 82:361.
4. Thayer J. and Martin J.E. Jr., 1966, Public Health Rep., 81:559.

5. Martin J.E. Jr. and Lester A., 1971, HSMHA Hlth. Service Rep., 86(1):30.
6. MacFaddin J., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.
7. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
8. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

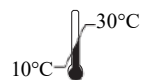
Revision : 08/2026



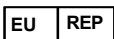
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MacConkey Broth (Double strength) w/Neutral Red

M539S

MacConkey Broth (Double strength) w/Neutral Red is used for primary isolation of coliforms from large samples such as water or waste water.

Composition**

Ingredients	Gms / Litre
Peptic digest of animal tissue	40.000
Lactose	20.000
Bile salts	10.000
Sodium chloride	10.000
Neutral red	0.140
Final pH (at 25°C)	7.5±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 80.14 grams in 1000 ml distilled water. Heat if necessary to dissolve the medium completely. Distribute into test tubes with inverted Durham tubes and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool the tubes before inoculation.

Note: Where the number of organisms is expected to be low , larger quantities of the sample may be directly added to equal amount of double strength medium in dilution bottles or flasks.

Principle And Interpretation

MacConkey Broth (Double strength) is recommended for detection of bacteria responsible for food poisoning ,for isolation, identification and enumeration of *Escherichia coli* (1). MacConkey Broth (Double strength) is also recommended for the primary isolation of coliforms from large samples such as water and wastewater.

MacConkey Broth has also been recommended for use in microbiological examination of foodstuffs (2) and for direct plating / inoculation of water samples for coliform counts (3). This media is also used for the Examination of Milk and Dairy Products (4) and pharmaceutical preparations (5). The selective action of this medium is attributed to bile salts, which are inhibitory to most species of gram-positive bacteria. Gram-negative bacteria usually grow well on the medium and are differentiated by their ability to ferment lactose. Lactose fermenting strains grow as yellow. Lactose non-fermenting strains, such as *Shigella* and *Salmonella* are colourless and transparent and typically do not alter appearance of the medium.

Quality Control

Appearance

Cream to yellow coloured homogeneous free flowing powder

Colour and Clarity of prepared medium

Red coloured clear solution without any precipitate.

Reaction

Reaction of 8.0% w/v aqueous solution at 25°C. pH : 7.5±0.2

pH

7.30-7.70

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Cultural Response

Organism	Inoculum (CFU)	Growth	Acid	Gas
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Cultural Response

<i>Enterobacter aerogenes</i> ATCC 13048	50-100	luxuriant	Positive reaction	Positive reaction
<i>Escherichia coli</i> ATCC 25922	50-100	luxuriant	Positive reaction	Positive reaction
<i>Salmonella choleraesuis</i> ATCC 12011	50-100	fair to good	Negative reaction	Negative reaction
<i>Staphylococcus aureus</i> ATCC 25923	$\geq 10^3$	inhibited		

Storage and Shelf Life

Store below 30°C in tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label.

Reference

1. Bureau of Indian Standards IS : 5887 (Part I) - 1976, reaffirm 1986.
2. Speck M. (Ed.), 1985, Compendium of Methods for the Microbiological Examination of Foods, 2nd ed., APHA, Washington, D.C.
3. Greenberg A. E., Clesceri L. S. and Eaton A. D., (Eds.), 1992, Standard Methods for the Examination of Water and Wastewater, 18th ed., APHA, Washington, D.C.
4. Marshall R. (Ed.), 1992, Standard Methods For the Examination of Dairy Products, 16th ed., APHA, Washington, D.C.
5. The United States Pharmacopoeia XXI and the National Formulary, 16th ed., 1985, United States Pharmacopoeial Convention, Inc., Washington, D.C.

Revision : 2 / 2015

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Slanetz and Bartley Medium

M612I

Intended use

Recommended for detection and enumeration of faecal Streptococci from water samples by membrane filtration technique. The composition and performance criteria of this medium are as per the specifications laid down in ISO/ DIS 7899 -2: 2000 (E) and APHA.

Composition**

ISO 7899-2:2000 (E), APHA	g / L	Slanetz and Bartley Medium	M612I
Ingredients		Ingredients	g / L
Tryptose	20.000	Tryptose	20.000
Yeast extract	5.000	Yeast extract	5.000
Glucose	2.000	Dextrose	2.000
Dipotassium hydrogen phosphate	4.000	Dipotassium hydrogen phosphate	4.000
Sodium azide	0.400	Sodium azide	0.400
TTC Solution (1%)	10.00ml	2,3,5-Triphenyl tetrazolium chloride	0.100
Agar	8-18	Agar	15.000
Final pH (at 25°C)	7.2±0.1	Final pH (at 25°C)	7.2±0.1

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 46.5 grams in 1000 ml purified / distilled water. Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE OR OVERHEAT. Excessive heating is detrimental. Cool to 45-50°C. Mix well and pour into sterile Petri plates.

Principle And Interpretation

Slanetz and Bartley Medium was originally devised by Slanetz and Bartley (1) for the detection and enumeration of Enterococci by membrane filtration technique. It can be also used as a direct plating medium (2,3). M612I differs from M612 in the type of buffering system used. This medium composition is as per specifications laid in ISO (4), APHA (5).

Tryptose and yeast extract serves as a source of essential nutrients along with B-complex vitamins and nitrogenous nutrients. The medium is highly selective for Enterococci. Sodium azide has inhibitory effect on gram-negative organisms. Triphenyl Tetrazolium Chloride is reduced to the insoluble formazan inside the bacterial cell forming dark red-coloured colonies. When the medium is incubated at higher temperature (44-45°C), all red or maroon colonies can be considered as presumptive Enterococci (6,7).

The Department of Health (8) has recommended this medium to be used for enumeration of Enterococci in water supplies. Water is filtered through a membrane filter which is then placed on the surface of the Slanetz and Bartley Medium plates and incubated at 35°C for 4 hours and then at 44-45°C for 44-48 hours. Red or maroon colonies are counted as Enterococci. The preliminary incubation at 35°C helps for the recovery of stressed organisms. Not all the species reduce TTC, hence pale colonies also should be considered. Food samples are homogenized and so diluted with physiological saline to give 15-150 colonies on each petri plate. Homogenates or dilutions are spread on agar surface and incubated at 35°C for 48 hours. Pink or dark red colonies with a narrow whitish border are counted (9).

Type of specimen

Water samples

Specimen Collection and Handling:

ISO 7899-2:2000:

Preparation of test sample: Prepare tenfold dilutions of water samples

Choice of technique:

- Pour plate method
- Spread plate method
- Membrane filtration method

Warning and Precautions :

Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. Further biochemical testing is required for identification of species.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Gelling

Firm, comparable with 1.5% Agar gel

Colour and Clarity of prepared medium

Light yellow coloured clear to slightly opalescent gel forms in Petri plates

Reaction

Reaction of 4.65% w/v aqueous solution at 25°C. pH : 7.2±0.1

pH

7.10 -7.30

Cultural Response

Cultural characteristics observed after an incubation at 44-45°C for 44-48 hours.

Organism	Inoculum (CFU)	Growth	Recovery	Colour of colony
<i>Enterococcus faecalis</i> ATCC 29212 (00087*)	50-100	good-luxuriant	≥50%	red or maroon
<i>Enterococcus faecalis</i> ATCC 19433 (00009*)	50-100	good-luxuriant	≥50%	red or maroon
<i>Enterococcus faecalis</i> WDCM 00176	50-100	good-luxuriant	≥50%	red or maroon
<i>Enterococcus faecium</i> ATCC 6057 (00177*)	50-100	good-luxuriant	≥50%	red or maroon
<i>Enterococcus faecium</i> WDCM 00178	50-100	good-luxuriant	≥50%	red or maroon
<i>Escherichia coli</i> ATCC 25922 (00013*)	≥10 ⁴	inhibited	0%	
<i>Escherichia coli</i> ATCC 8739 (00012*)	≥10 ⁴	inhibited	0%	
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC 6538 (00032*)	≥10 ⁴	inhibited	0%	
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC 25923 (00034)*	≥10 ⁴	inhibited	0%	

Key : * - Corresponding WDCM numbers

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques (10,11).

Reference

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HiCrome® Candida Differential Agar Base

M1297AR

Intended use

Recommended as a selective and differential medium for rapid isolation and identification of *Candida* species from mixed cultures from clinical and non-clinical samples.

Composition**

Ingredients	g / L
Peptone	4.000
Chromogenic mixture	13.600
Agar	13.600
Final pH (at 25°C)	6.0±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 15.6 gram in 500 ml purified / distilled water. Add the rehydrated contents of one vial of CH250 Selective Supplement (FD283R). Heat to boiling with frequent agitation to dissolve the medium completely. **DO NOT AUTOCLAVE**. Cool to 45-50°C. Mix well and pour into sterile Petri plates.

Principle And Interpretation

Perry and Miller (1) reported that *Candida albicans* produces an enzyme β -N-acetyl-galactosaminidase and according to Rousselle et al (2) incorporation of chromogenic or fluorogenic hexosaminidase substrates into the growth medium helps in identification of *C. albicans* isolates directly on primary isolation. HiCrome® Candida Differential Agar Base incorporates two chromogens X-NAG which detects the activity of hexosaminidase and BCIP which detects phosphatase activity. HiCrome® Candida Differential Agar Base is a selective and differential medium, which facilitates rapid isolation of yeasts from mixed cultures and allows differentiation of *Candida* species namely *C.albicans*, *C.krusei*, *C.tropicalis* and *C.glabrata* on the basis of colouration and colony morphology. On this medium results are obtained within 48 hours and it is useful for the rapid and presumptive identification of common yeasts in Mycology and Clinical Microbiology Laboratory. Peptone provides nitrogenous, carbonaceous compounds and other essential growth nutrients. Chloramphenicol from the supplement suppresses the accompanying bacterial flora. *C.albicans* appear as light green coloured smooth colonies, *C.tropicalis* appear as blue to metallic blue coloured raised colonies. *C.glabrata*, *C.kefyr*, *C.parapsilosis* colonies appear as cream to white, beige/yellow due to natural pigmentation and some alkaline phosphatase activity, while *C.krusei* appear as pink-purple, fuzzy, dry colonies.

Type of specimen

Clinical samples - skin scrapings, urine, etc.; Food & dairy samples

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (3,4).

For food and dairy samples, follow appropriate techniques for sample collection and processing as per guidelines (5,6). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

In Vitro diagnostic Use. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. Variations in colour intensity may be observed for *Candida* isolates depending on the presence of enzymes.
2. Other *Candida* species may produce light mauve coloured colonies which is also produced by other yeast cells. This must be confirmed by further biochemical tests.
3. Other filamentous fungi also exhibit colour on this medium.

Performance and evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to beige homogeneous free flowing powder

Gelling

Firm, comparable with 1.36% Agar gel

Colour and Clarity of prepared medium

Offwhite to cream coloured, opaque gel forms in Petri plates

Reaction

Reaction of 3.12% w/v aqueous solution at 25°C. pH : 6.0±0.2

pH

5.80-6.20

Cultural Response

Cultural characteristics observed with added CH250 Selective Supplement (FD283R) after an incubation at 30-35°C for 40-48 hours.

Organism	Inoculum (CFU)	Growth	Recovery	Colour of Colony
<i>Candida albicans</i> ATCC 10231 (00054*)	50-100	good-luxuriant	≥50%	light green
<i>Candida glabrata</i> ATCC 15126	50-100	good-luxuriant	≥50%	cream to mauve
# <i>Teunomyces krusei</i> ATCC 24408	50-100	good-luxuriant	≥50%	purple, fuzzy
<i>Candida tropicalis</i> ATCC 750	50-100	good-luxuriant	≥50%	blue to purple
<i>Candida kefyr</i> ATCC 66058	50-100	good-luxuriant	≥50%	cream to white with slight purple centre or brown
<i>Candida utilis</i> ATCC 9950	50-100	good-luxuriant	≥50%	pale pink to pinkish purple
<i>Candida parapsilosis</i> ATCC 22019	50-100	good-luxuriant	≥50%	white to cream
<i>Candida membranifaciens</i> ATCC 20137	50-100	good-luxuriant	≥50%	white to cream (occasionally blue or blue-grey)
<i>Candida dubliensis</i> NCPF 3949	50-100	good-luxuriant	≥50%	pale green
<i>Escherichia coli</i> ATCC 25922 (00013*)	≥10 ⁴	inhibited	0%	
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC 25923 (00034*)	≥10 ⁴	inhibited	0%	

Key : *Corresponding WDCM numbers. # - Formerly known as *Candida krusei*

Storage and Shelf Life

Store between 15-25°C in a tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (3,4).

Reference

- 1.Perry J. L. and Miller G. R., 1987, J. Clin. Microbiol., 25: 2424 -2425.
- 2.Rousselle P., Freydiere A., Couillerot P., de Montclos H. and GilleY., 1994, J. Clin. Microbiol. 32:3034-3036.
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- 4.Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
- 5 American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
- 6.Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.

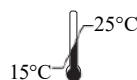
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HiMedia Laboratories Pvt. Limited,
Plot No.C-40, Road No.21Y,
MIDC,WagleIndustrial Area,
Thane (W) -400604, MS, India



In vitro diagnostic
medical device



Storage temperature



AR Experts BV
Boeingavenue 209
1119 PD Schiphol-Rijk
The Netherlands



CE Marking



Do not use if
package is damaged

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Fraser Broth Base

M1327

Intended use

Recommended, recommended as a primary as well as secondary enrichment medium, for the isolation and enumeration of *Listeria monocytogenes* from food and animal feeds. The composition and performance criteria of this media is as per the specification laid down in ISO 11290-1:2017, ISO 11290-2:2017 and ISO 11133:2014 (E) /Amd.: 2020.

Composition**

ISO 11290 Specification - Half Fraser & Fraser

Ingredients	g / L
Enzymatic digest of animal tissues	5.000
Enzymatic digest of casein	5.000
Yeast extract	5.000
Meat extract	5.000
Sodium chloride	20.000
Disodium hydrogen phosphate dihydrate	12.000
Potassium dihydrogen phosphate	1.350
Esculin	1.000
Lithium chloride	3.000
Final pH (at 25°C)	7.2±0.2

Fraser Broth : Half Fraser & Fraser broth

Ingredients	g / L
Peptone #	5.000
Tryptone \$	5.000
Yeast extract	5.000
HM extract ##	5.000
Sodium chloride	20.000
Disodium hydrogen phosphate dihydrate	12.000
Potassium dihydrogen phosphate	1.350
Esculin	1.000
Lithium chloride	3.000
Final pH (at 25°C)	7.2±0.2

Supplements to be added after autoclaving

	Half fraser g / L	Fraser g / L		Half fraser g / L	Fraser g / L
			FD125I	1 vial	2 vials
Acriflavin hydrochloride	0.0125	0.025	Acriflavin hydrochloride	0.0125	0.025
Nalidixic acid, sodium salt	0.01	0.02	Nalidixic acid, sodium salt	0.01	0.02
			FD141	2 vials	2 vials
Ammonium Iron citrate	0.5	0.50	Ammonium Iron citrate	0.5	0.50

**Formula adjusted, standardized to suit performance parameters

- Equivalent to Enzymatic digest of animal tissues

\$ - Equivalent to Enzymatic digest of casein

- Equivalent to Meat extract

Directions

Suspend 54.92 gram (the equivalent weight of dehydrated medium per litre) in 1000 ml purified / distilled water. Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C and aseptically add rehydrated contents of 1 vial of Fraser Selective Supplement (FD125I) and 2 vials of Fraser Supplement (FD141) to 1000 ml medium for primary enrichment or 1 vial of each to 500 ml medium for secondary enrichment. Mix well and dispense in tubes or flasks as desired.

Principle And Interpretation

Listeria species are widely distributed in the environment. They have been isolated from soil, decaying vegetable matter, silage, sewage, water, animal feed, fresh and frozen poultry, meats, raw milk, cheese and asymptomatic human and animal carriers (1). *L.monocytogenes* primarily causes meningitis, encephalitis or septicemia in humans (2,3). In pregnant women, *L.monocytogenes* often causes influenza like bacteremic illness that, if untreated, may lead to amnionitis and infection of the fetus, resulting in abortion, still birth or premature birth. Contaminated foods are the primary vehicles of transmission (4). Fraser Broth Base is based on the formulation of Fraser and Sperber (5) is used for the detection of *Listeria* species in food products (6). Fraser Broth Base is formulated so as to provide optimum conditions for the growth of *Listeria*. This medium is recommended by ISO for primary and secondary enrichment of *Listeria* species (7,8,9).

Peptone, Tryptone, yeast extract, and HM extract make the media highly nutritive by providing essential nutrients including

carbonaceous and nitrogenous substances. Phosphates maintain the buffering capacity of the medium. All *Listeria* species exhibit beta-glucosidase activity which is evident by the blackening of the media. *Listeria* species hydrolyze esculin (substituted glucoside) to glucose and esculetin. The latter combines with ferric ions of ferric ammonium citrate (FD141), resulting in the formation of 6-7 dihydroxycoumarin, a black brown complex. Ferric ammonium citrate also enhances the growth of *L.monocytogenes* (10). The high salt tolerance (of sodium chloride) of *Listeria* is used as means to inhibit the growth of Enterococci. Lithium chloride is also used to inhibit Enterococci, which also possess the ability to hydrolyze esculin. Growth of accompanying bacteria is largely inhibited by the addition of Nalidixic acid and Acriflavin hydrochloride (FD125I).

Type of specimen :

Food samples

Specimen Collection and Handling:

1. Initial suspension

This broth is used as an dilution fluid for the preparation of initial suspension

25grams/25 ml of sample to 225 ml of the medium (M1327 + 1 vial of FD125I + 2 vials of FD141)

2. Primary enrichment

The dilution prepared in Half Fraser broth is incubated at 30°C ± 1°C for 24-26 hours.

The preenriched sample after incubation can be stored at 5°C for a maximum of 72 hours before transfer to Fraser Broth (secondary enrichment)

A black colouration can develop during incubation.

3. Secondary Enrichment

0.1 ml of culture from primary enrichment is added to 10 ml of Fraser Broth (secondary enrichment). It is incubated at 37°C ± 1°C for 24 ± 2 hours.

Additional incubation of 24 hours for *Listeria* species other than *L.monocytogenes* is recommended to allow recovery of more species.

The sample from primary enrichment and secondary enrichment is then subcultured on HiCrome™ *Listeria* Ottaviani-Agosti Agar Base (M1540I) and on *Listeria* Oxford Medium Base (M1145) or *Listeria* Identification Agar Base (PALCAM) (M1064I). Incubate at 37 ± 1 °C for 24 ± 2 hours. Additional incubation at 37 ± 1 °C for 24 ± 2 hours is recommended for *Listeria* spp. other than *L.monocytogenes* for recovery of more species. (7,8)

Warning and Precautions :

Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium.
2. Each lot of the medium has been tested for the organisms specified on the COA. It is recommended to users to validate the medium for any specific microorganism other than mentioned in the COA based on the user's unique requirement.
3. Presence of *L.monocytogenes* is often masked by other *Listeria* species like *L.inocua* and *L.ivanovii*.
4. Further subculture of organisms on selective media is required.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Colour and Clarity of prepared medium

Basal medium : Yellow coloured clear solution with slight precipitate. After addition : Fluorescent yellow coloured clear solution with slight precipitate forms in tubes.

Reaction

Reaction of 5.49% w/v aqueous solution at 25°C. pH : 7.2±0.2

pH

7.00-7.40

Cultural Response**Half Fraser (Primary Enrichment)**

Organism	Inoculum (CFU)	Growth	Esculin Hydrolysis	Recovery on M1540I*	Colour of colony on M1540I*
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Productivity

Cultural characteristics observed on addition of FD125I and FD141 after an incubation at $30 \pm 1^\circ\text{C}$ for 25 ± 1 hour. Further subculture is carried out on M1540I at $37 \pm 1^\circ\text{C}$ for 48 ± 4 hours.

<i>Listeria monocytogenes</i> 1/2a ATCC 35152 (00109*) +	50-100	good-luxuriant	positive reaction, blackening of medium	>10 colonies	Blue green colonies w/ opaque halo
<i>Escherichia coli</i> ATCC 25922 (00013*) +	$\geq 10^4$				
<i>Enterococcus faecalis</i> ATCC 29212 (00087*)	$\geq 10^4$				
<i>Listeria monocytogenes</i> 1/2a ATCC 35152 (00109*) +	50-100	good-luxuriant	positive reaction, blackening of medium	>10 colonies	Blue green colonies w/ opaque halo
<i>Escherichia coli</i> ATCC 8739 (00012*) +	$\geq 10^4$				
<i>Enterococcus faecalis</i> ATCC 19433 (00009*)	$\geq 10^4$				
<i>Listeria monocytogenes</i> 4b ATCC 13932 (00021*) +	50-100	good-luxuriant	positive reaction, blackening of medium	>10 colonies	Blue green colonies w/ opaque halo
<i>Escherichia coli</i> ATCC 25922 (00013*) +	$\geq 10^4$				
<i>Enterococcus faecalis</i> ATCC 29212 (00087*)	$\geq 10^4$				
<i>Listeria monocytogenes</i> 4b ATCC 13932 (00021*) +	50-100	good-luxuriant	positive reaction, blackening of medium	>10 colonies	Blue green colonies w/ opaque halo
<i>Escherichia coli</i> ATCC 8739 (00012*) +	$\geq 10^4$				
<i>Enterococcus faecalis</i> ATCC 19433 (00009*)	$\geq 10^4$				

Selectivity

Cultural characteristics observed on addition of FD125I and FD141 after an incubation at $30 \pm 1^\circ\text{C}$ for 25 ± 1 hour. Further subculture is carried on Tryptone Soya Agar (M290) after an incubation at $37 \pm 1^\circ\text{C}$ for 48 ± 4 hours.

Organism	Inoculum (CFU)	Growth	Recovery on M290
<i>Escherichia coli</i> ATCC 25922 (00013*)	$\geq 10^4$	inhibited	0
<i>Escherichia coli</i> ATCC 8739 (00012*)	$\geq 10^4$	inhibited	0
<i>Enterococcus faecalis</i> ATCC 29212 (00087*)	$\geq 10^4$	none-poor	<100 colonies
<i>Enterococcus faecalis</i> ATCC 19433 (00009*)	$\geq 10^4$	none-poor	<100 colonies

Fraser (Secondary Enrichment)

Organism	Inoculum (CFU)	Growth	Esculin Hydrolysis	Recovery on M1540I*	Colour of colony on M1540I*
Productivity					
Cultural characteristics observed on addition of FD125I and FD141 after an incubation at 37 ± 1°C for 24 ± 2 hours. Further subculture is carried out on M1540I at 37 ± 1°C for 48± 4 hours.					
<i>Listeria monocytogenes</i> 1/2a ATCC 35152 (00109*) +	50-100	good-luxuriant	positive reaction, blackening of medium	>10 colonies	Blue green colonies w/ opaque halo
<i>Escherichia coli</i> ATCC 25922 (00013*) +	≥10 ⁴				
<i>Enterococcus faecalis</i> ATCC 29212 (00087*)	≥10 ⁴				
<i>Listeria monocytogenes</i> 1/2a ATCC 35152 (00109*) +	50-100	good-luxuriant	positive reaction, blackening of medium	>10 colonies	Blue green colonies w/ opaque halo
<i>Escherichia coli</i> ATCC 8739 (00012*) +	≥10 ⁴				
<i>Enterococcus faecalis</i> ATCC 19433 (00009*)	≥10 ⁴				
<i>Listeria monocytogenes</i> 4b ATCC 13932 (00021*) +	50-100	good-luxuriant	positive reaction, blackening of medium	>10 colonies	Blue green colonies w/ opaque halo
<i>Escherichia coli</i> ATCC 25922 (00013*) +	≥10 ⁴				
<i>Enterococcus faecalis</i> ATCC 29212 (00087*)	≥10 ⁴				
<i>Listeria monocytogenes</i> 4b ATCC 13932 (00021*) +	50-100	good-luxuriant	positive reaction, blackening of medium	>10 colonies	Blue green colonies w/ opaque halo
<i>Escherichia coli</i> ATCC 8739 (00012*) +	≥10 ⁴				
<i>Enterococcus faecalis</i> ATCC 19433 (00009*)	≥10 ⁴				

Selectivity

Cultural characteristics observed on addition of FD125I and FD141 after an incubation at 37 ± 1°C for 24 ± 2 hour. Further subculture is carried on Tryptone Soya Agar (M290) after an incubation at 37 ± 1°C for 48± 4 hours.

Organism	Inoculum (CFU)	Growth	Recovery on M290
<i>Escherichia coli</i> ATCC 25922 (00013*)	≥10 ⁴	inhibited	0
<i>Escherichia coli</i> ATCC 8739 (00012*)	≥10 ⁴	inhibited	0
<i>Enterococcus faecalis</i> ATCC 29212 (00087*)	≥10 ⁴	none-poor	<100 colonies
<i>Enterococcus faecalis</i> ATCC 19433 (00009*)	≥10 ⁴	none-poor	<100 colonies

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and prepared medium at 2-8°C . Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques (1,4).

Reference

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Synthetic Sea Salt

M1344

Synthetic Sea Salt is recommended for preparation of special diluents.

Composition**

Ingredients	Gms / Litre
Calcium chloride, 2H ₂ O	0.836
Potassium chloride	0.435
Strontium chloride, 6H ₂ O	0.0007
Sodium bicarbonate	0.1515
Magnesium sulphate, 7H ₂ O	3.800
Magnesium chloride, 6H ₂ O	2.940
Borax	0.030
Sodium chloride	14.900
Final pH (at 25°C)	7.5±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 19.38 grams (the equivalent weight of dehydrated medium per litre) in 1000ml distilled water. Heat, if necessary, to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Mix well and dispense as desired.

Principle And Interpretation

The coliform group consists of several genera of bacteria belonging to the family *Enterobacteriaceae* (1). Coliforms can be detected by performing the multiple tube test so as to obtain the most probable number (MPN). Synthetic Sea Salt, recommended by ISO Committee (2) is used to prepare special diluents. It is used as a diluent during detection and enumeration of *Escherichia coli* and coliforms in surface and wastewater. Sodium chloride in the medium helps to maintain osmotic balance and the other ingredients provide buffering action.

Quality Control

Appearance

White to cream homogeneous free flowing powder

Colour and Clarity of prepared medium

Colourless clear solution without any precipitate

Reaction

Reaction of 1.93% w/v aqueous solution at 25°C. pH : 7.5±0.2

pH

7.30-7.70

Cultural Response

M1344: Satisfactory results are obtained when used as a diluent during detection and enumeration of *E.coli* and coliform bacteria in surface and wastewater.

Storage and Shelf Life

Store below 30°C in tightly closed container and the prepared medium at 2 - 8°C. Use before expiry date on the label.

Reference

1. Eaton A. D., Clesceri L. S. and Greenberg A. E., (Ed.), 1998, Standard Methods for the Examination of water and Wastewater, 20th Ed., American Public Health Association, Washington, D.C.
2. International Organization for Standardization (ISO), 1995, Draft ISO/DIS 9308-3: 1998 (E) Pg No. 14.

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Bifidobacterium Broth (Modified w/ 0.1% Agar)

M1395A

Bifidobacterium Broth (Modified w/ 0.1% agar) is used for the cultivation of Bifidobacterium species.

Composition**

Ingredients	Gms / Litre
Casein enzymic hydrolysate	20.000
Yeast extract	10.000
Peptone	10.000
Glucose	20.000
Tomato juice (solids)	16.650
Polysorbate 80	2.000
Agar	1.000
Final pH (at 25°C)	6.8±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 79.65 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Distribute in tubes or flasks as desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle And Interpretation

The genus *Bifidobacterium* is the third most numerous bacterial population found in the human intestine after *Bacteroides* and *Eubacterium*. It is an anaerobic bacteria that makes up the gut microbial flora, it resides in the colon and have health benefits for their hosts. Bifidobacteria are also associated with lower incidences of allergies (1, 2). Bifidobacterium Broth is used for the cultivation and maintenance of *Bifidobacterium* species. The medium is used exclusively for the cultivation of *Bifidobacterium infantis* (3). The medium has Casein enzymic hydrolysate, Peptone and yeast extract that provides essential growth nutrients. Glucose is the energy source. Tomato juice helps in maintaining acidic pH while polysorbate 80 provides fatty acids required for metabolic activity of Bifidobacterium. Addition of 0.1% agar helps in creating favorable conditions for the growth of *Bifidobacterium* species.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Colour and Clarity of prepared medium

Amber coloured clear to slightly opalescent solution.

Reaction

Reaction of 7.96% w/v aqueous solution at 25°C. pH : 6.8±0.2

pH

6.60-7.00

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours under anaerobic conditions.

Cultural Response

Organism	Inoculum (CFU)	Growth
Cultural Response <i>Bifidobacterium infantis</i> ATCC 25962	50-100	good-luxuriant

Storage and Shelf Life

Store below 30°C in tightly closed container and use freshly prepared medium. Use before expiry date on the label.

Reference

1. Bjorksten B., Sepp E., Julge K., Voor T., and Mikelsaar M., 2001, J. Allergy Clin. Microbiol., Volume 108, Issue 4, 516-520.
2. Guarner F., and Malagelada J. R., 2003, The Lancet, Vol. 361, Issue 9356, 8 February 2003, 512-519.
3. Atlas R. M. 2004, 3rd Edi. Handbook of Microbiological Media, Parks, L. C. (Ed.), CRC Press, Boca Raton.

Revision : 00 / 2011



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HiCrome® UTI Agar, Modified

M1418

Intended use:

Recommended for identification, differentiation and confirmation of enteric bacteria from specimens such as urine which may contain large number of *Proteus* species as well as potentially pathogenic gram-positive organisms.

Composition**

Ingredients	g / L
Peptone	18.000
Tryptone	4.000
HM Peptone B#	6.000
Chromogenic mixture	12.440
Agar	15.000
Final pH (at 25°C)	7.2±0.2

**Formula adjusted, standardized to suit performance parameters

-Equivalent to Beef extract

Directions

Suspend 55.44 gram in 1000 ml purified/distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Mix well and pour into sterile Petri plates.

Principle And Interpretation

HiCrome® UTI Agar, Modified is formulated on the basis of work carried out by Pezzlo (1), Wilkie et al (2), Friedman et al (3), Murray et al (4), Soriano and Ponte (5) and Merlino et al (6). These media is the modification of HiCrome® UTI Agar (M1353), which can be used in place of MacConkey Agar for isolation and confirmation of various microorganisms. It facilitates and expedites the identification of some gram-negative bacteria and some gram-positive bacteria on the basis of different contrasted colony colours produced by reactions of genus or species specific enzymes with two chromogenic substrates.

Enzymes produced by *Enterococcus* species, *Escherichia coli* and coliforms cleave the chromogenic substrates incorporated in the medium. Presence of rich source of phenylalanine and tryptophan from peptone and tryptone provides an indication of tryptophan deaminase activity, revealed with TDA Reagent (R036) indicating the presence of *Proteus* species, *Morganella* species and *Providencia* species, which appear brown. One chromogenic substrate is cleaved by β -glucosidase possessed by Enterococci resulting in formation of blue colonies. *E.coli* produce purple-magenta colonies due to the enzyme β -D-galactosidase which cleaves the other chromogenic substrate. Further confirmation of *E.coli* can be done by performing indole test using DMACA Reagent (R035). Also, some strains of *Enterobacter cloacae* lacking β -glucosidase show pink-colonies indistinguishable from *E.coli*. The DMACA reagent for indole test (should be performed on filter paper) distinguishes between *E.coli* and *Enterobacter*, and also between *Proteus mirabilis* and other species. Coliforms produce purple coloured colonies due to cleavage of both the chromogenic substrates Peptone, HM Peptone B and tryptone provides nitrogenous, carbonaceous compounds and other essential growth nutrients.

Type of specimen

Clinical samples : urine, throat swabs, lung abscess, etc.

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (7,8).

For food and dairy samples, follow appropriate techniques for sample collection and processing as per guidelines (9,10). For water samples, follow appropriate techniques for sample collection, processing as per guidelines and local standards (11).

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic use. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. Since it is an enzyme-substrate based reaction, the intensity of colour may vary with isolates.
2. Further biochemical and serological test must be carried out for confirmation.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Gelling

Firm, comparable with 1.5% Agar gel

Colour and Clarity of prepared medium

Light amber coloured, clear to slightly opalescent gel forms in Petri plates

Reaction

Reaction of 5.54% w/v aqueous solution at 25°C. pH : 7.2±0.2

pH

7.00-7.40

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 24 hours.

Organism	Inoculum (CFU)	Growth	Recovery	Colour of Colony	TDA (add 1-2 drops of TDA reagent)	DMACA (transfer colony on filter paper dipped in DMACA Reagent)
<i>Escherichia coli</i> ATCC 25922 (00013*)	50-100	luxuriant	≥70%	Purple to magenta	negative reaction	positive reaction, formation of blue purple colour around growth
<i>Enterococcus faecalis</i> ATCC 29212 (00087*)	50-100	luxuriant	≥70%	blue-green (small)	negative reaction	negative reaction
<i>Klebsiella pneumoniae</i> ATCC 13883 (00097*)	50-100	luxuriant	≥70%	blue to purple, mucoid	negative reaction	negative reaction
<i>Proteus mirabilis</i> ATCC 12453	50-100	luxuriant	≥70%	light brown	positive reaction, development of brown colouration	negative reaction
<i>Pseudomonas aeruginosa</i> ATCC 27853 (00025*)	50-100	luxuriant	≥70%	colourless (greenish pigment may be observed)	negative reaction	negative reaction
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC 25923 (00034*)	50-100	luxuriant	≥70%	golden yellow	negative reaction	negative reaction

Key : (*) Corresponding WDCM numbers.

Storage and Shelf Life

Store between 15-25°C in a tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (7,8).

Reference

1. Pezzlo M, (1998), Clinical Microbiology Reviews, 1:268-280
2. Wilkie M.E., Almond M.K. and Marsh F.P., (1992), British Medical Journal, 305:1137-1141.
3. Friedman M.P. et al. (1991), Journal of Clinical Microbiology, 29:2385-2389.
4. Murray P., Tenover P. and Tenover F.C., (1992), Journal of Clinical Microbiology, 30:1600-1601.
5. Soriano F. and Ponte C., (1992), Journal of Clinical Microbiology, 30:3033-3034.
6. Merlino et al. (1995), Abstr. Austr. Microbiol., 16(4):17-3.
7. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
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10. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed., APHA Inc., Washington, D.C.
11. Lipps WC, Braun-Howland EB, Baxter TE, eds. Standard methods for the Examination of Water and Wastewater, 24th ed. Washington DC:APHA Press; 2023.

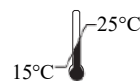
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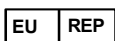
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Plot No.C-40, Road No.21Y,
MIDC,WagleIndustrial Area,
Thane (W) -400604, MS, India



**In vitro diagnostic
medical device**



Storage temperature



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CE Marking



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package is damaged**

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Eugonic LT 100 Broth Base w/o Tween 80

M1517

Intended Use:

Recommended for the enrichment and detection of mesophilic aerobic bacteria present in cosmetic products. The composition Eugonic and performance criteria of the medium are as per the specifications laid down in ISO 21149.

Composition**

Ingredients	Gms / Litre
Tryptone	15.000
Soya peptone	5.000
Sodium chloride	4.000
L-Cystine	0.700
Sodium sulphite	0.200
Glucose	5.500
Egg lecithin	1.000
Tritox X-100	1.000
Final pH (at 25°C)	7.0±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 32.4 grams in 1000 ml purified/distilled water containing 5 grams of Polysorbate 80 (Tween 80). Heat to boiling to dissolve the medium completely. Dispense into tubes or flasks as desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle And Interpretation

Eugonic LT 100 Broth Base was developed by Pelczar and Vera (1) for cultivation of fastidious organisms like *Brucella*. Eugon media were developed to obtain eugonic (luxuriant) growth of fastidious microorganisms like *Brucella* which are otherwise difficult to cultivate (2). The unenriched medium supports rapid growth of lactobacilli associated with cured meat products, dairy products and other foods. Eugonic media is quite similar to Tryptone Soya Agar (M290) but more bacterial propagation is expected on Eugonic media. Organisms like *Bordetella* and *Neisseria* grow luxuriantly in Eugon Media because large amount of sulfur and carbon sources have been added in the formula. Eugonic LT 100 Broth Base can be used for growth of a variety of fastidious microorganisms like *Neisseria*, *Francisella* and *Brucella*. The composition of the medium is as per ISO (3) for the detection of mesophilic aerobic bacteria from cosmetic products.

Tryptone and soya peptone provide the nitrogen, vitamins and amino acids, which supports the growth of fastidious microbial species. The high concentration of glucose is the energy source for rapid growth of bacteria. L-Cystine and sodium sulphite are added to stimulate growth. Sodium chloride maintains the osmotic balance of the media. The high carbohydrate content along with high sulfur (cystine) content improves growth with chromogenicity (4). Lecithin and polysorbate 80 in Eugonic LT 100 Medium w/o Tween 80 neutralize antimicrobial agents hence this medium can be used as a neutralizing diluent.

Type of specimen

Cosmetic samples

Specimen Collection and Handling

For cosmetic samples, follow appropriate techniques for sample collection, processing as per guidelines and local standards (5). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection.

Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. Certain fastidious organisms may not grow due to nutritional variation.
2. Further biochemical tests must be carried out for confirmation.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Colour and Clarity of prepared medium

Yellow coloured, Clear to slightly opalescent solution.

Reaction

Reaction of 3.24% w/v aqueous solution at 25°C. pH : 7.0±0.2

pH

6.80-7.20

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours (fungal cultures incubated at 25-30°C for 2-7 days).

Organism	Inoculum (CFU)	Growth
<i>Bacillus pumilus</i> ATCC 14884	50-100	good
<i>Candida albicans</i> ATCC 26790	50-100	good
<i>Lactobacillus fermentum</i> ATCC 9338	50-100	good
<i>Streptococcus pneumoniae</i> ATCC 6303	50-100	good-luxuriant (under 3-5% CO ₂)
<i>Streptococcus pyogenes</i> ATCC 19615	50-100	good-luxuriant (under 3-5% CO ₂)
<i>Staphylococcus aureus</i> <i>subsp.aureus</i> ATCC 25923 (00034*)	50-100	good-luxuriant
<i>Staphylococcus aureus</i> <i>subsp.aureus</i> ATCC 6538 (00032*)	50-100	good
<i>Bacillus subtilis subsp.</i> <i>spizizenii</i> ATCC 6633 (00003*)	50-100	good
<i>Pseudomonas aeruginosa</i> ATCC 9027 (00026*)	50-100	good
<i>Escherichia coli</i> ATCC 8739 (00012*)	50-100	good
<i>Candida albicans</i> ATCC 10231 (00054*)	50-100	good
<i>Neisseria meningitidis</i> ATCC 13090	50-100	good

* Corresponding WDCM Numbers

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 20-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques (5,6).

Reference

- 1.Pelczar and Vera J., 1949, Milk Plant Monthly 38:30
- 2.MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams & Wilkins, Baltimore, Md.
- 3.ISO 21149 (2006) Cosmetics-Microbiology- Enumeration and detection of aerobic mesophilic bacteria
- 4.Frank H. A., 1955, J. Bacteriol., 70:269.
- 5.Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
- 6.Jorgensen,J.H., Pfaller , M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

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Mueller Hinton Agar 2% Glucose w/ Methylene blue

M1825

Intended Use:

Recommended for performing antifungal disc diffusion susceptibility of yeasts.

Composition**

Ingredients	g / L
HM infusion B #	2.000
Acicase®	17.500
Starch	1.500
Dextrose (Glucose)	20.000
Methylene blue	0.0005
Agar	17.000
Final pH (at 25°C)	7.3±0.1

**Formula adjusted, standardized to suit performance parameters

Equivalent to Beef Infusion from

Directions

Suspend 58.0 grams in 1000 ml purified/distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Mix well and pour into sterile Petri plates.

The performance of this batch has been tested and standardized as per the current CLSI (formerly NCCLS) document M44-A2 in Method for Antifungal Disk Diffusion susceptibility testing of yeasts.

Principle And Interpretation

The Mueller Hinton formulation was originally developed as a simple, transparent agar medium for the cultivation of pathogenic species (1). Mueller Hinton Agar, Modified (as per CLSI for antifungal) is recommended for the diffusion of antifungal agents impregnated on paper disc through an agar gel as described in CLSI Approved Standard (2). When supplemented with glucose to a final concentration of 2%, it provides for suitable fungal growth. The addition of methylene blue to a final concentration of 5µg/ml enhances zone edge definition.

Kirby-Bauer et al recommended Mueller Hinton Agar for performing antibiotic susceptibility tests using a single disc of high concentration (3). WHO Committee on Standardization of Susceptibility Testing has accepted Mueller Hinton Agar for determining the susceptibility of microorganisms because of its reproducibility (4). Mueller Hinton Agar with 5% sheep blood and Mueller Hinton Agar with Haemoglobin have been recommended for antimicrobial susceptibility testing of *Streptococcus pneumoniae* and *Haemophilus influenzae*. Similarly Mueller Hinton Agar, Modified (as per CLSI for antifungal) is recommended for antifungal susceptibility testing of discs.

HM infusion B and Acicase® provide nitrogenous compounds, carbon, sulphur and other essential nutrients. Starch acts as a protective colloid against toxic substances present in the medium. Starch hydrolysis yields dextrose, which serves as a source of energy. Dextrose (Glucose) serves as an energy source for fungal cultures while Methylene blue enhances zone edge definition.

Technique:

Preparation of Inoculum:

1. Inoculum is prepared by picking five distinct colonies of approximately 1mm from 24 hours old culture grown on Sabouraud Dextrose Agar (M063) and incubated at 35 ± 2°C. Colonies are suspended in 5ml of sterile 0.85% Saline.
2. Vortex the resulting suspension and adjust the turbidity to yield 1 x 10⁶ - 5 x 10⁶ cells /ml (i.e. 0.5 McFarland standard).

Test Procedure:

1. Prepare plates with Mueller Hinton Agar, Modified (as per CLSI for antifungal) for carrying out susceptibility of antifungal discs. The medium in the plates should be sterile and have a depth of about 4 mm.
2. Dip a sterile non-toxic cotton swab on a wooden applicator into the standardized inoculum (turbidity so adjusted, as to obtain semi confluent growth on the Petri plate) and rotate the soaked swab firmly against the upper inside wall of the tube

to express excess fluid. Streak the entire agar surface of the plate with the swab three times, turning the plate at 60° angle between each streaking. Allow the inoculum to dry for 5-15 minutes with lid in place.

3. Apply the discs using aseptic technique. Deposit the discs with centers at least 24 mm apart. (Not more than 12 discs should be placed on a 150-mm plate or not more than 5 discs on a 100-mm plate).

4. Invert the plates and place in an incubator set to $35 \pm 2^\circ\text{C}$ within 15 minutes after the discs are applied.

5. Examine each plate after 20 - 24 hours of incubation. If plate was satisfactorily streaked the resulting zones of inhibition will be uniformly circular and there will be a semi-confluent lawn of growth. Read at 48 hours only when insufficient growth is observed after 24 hours incubation.

Type of specimen

Isolated Microorganism from clinical samples.

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (5,6).

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic Use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. This medium is recommended for susceptibility testing of pure cultures only.
2. Inoculum density may affect the zone size. Heavy inoculum may result in smaller zones or bigger zones.
3. Fastidious organisms may not grow on this medium due to nutritional variations.
4. Antifungal disc are used to carry out the susceptibility, proper storage of the disc is desired of the disc.
5. Under certain circumstances, the in vitro results of antifungal susceptibility may not show the same in vivo.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period at recommended temperature.

Quality Control

Appearance

Light yellow to yellow may have slight blue tinge homogeneous free flowing powder

Gelling

Firm, comparable with 1.7% agar gel.

Colour and Clarity of prepared medium

amber coloured clear to slightly opalescent gel forms in Petri plates

Reaction

Reaction of 5.8% w/v aqueous solution at 25°C . pH : 7.3 ± 0.1

pH

7.20-7.40

Cultural response

A luxuriant growth of test organisms was observed on Mueller Hinton Agar, Modified (as per CLSI for antifungal) in 24-48 hours at $33-37^\circ\text{C}$ along with inhibition zones with respective antibiotic concentrations

Organism	Inoculum (CFU)	Growth	Recovery	Amphotericin-B AP(100units)	Amphotericin-B AP(20 mcg)	Amphotericin-B AP(50 mcg)
<i>Candida albicans</i> ATCC 90028	50-100	luxuriant	$\geq 70\%$	10 -17 mm	10 -15 mm	31- 42 mm
<i>Candida parapsilosis</i> ATCC 22019	50-100	luxuriant	$\geq 70\%$	11 -20 mm	10 -17 mm	28 -37 mm
<i>Candida tropicalis</i> ATCC 750	50-100	luxuriant	$\geq 70\%$	8 -12 mm	8 -10 mm	13 -17 mm

<i>Candida krusei</i> ATCC 6258	50-100	luxuriant	$\geq 70\%$	9 -14 mm	8 -12 mm	16 -25 mm
<i>Candida albicans</i> ATCC 10231 (00054*)	50-100	luxuriant	$\geq 70\%$	10 -18 mm	10 -16 mm	30 -40 mm
<i>Saccharomyces cerevisiae</i> ATCC 9763 (00058*)	50-100	luxuriant	$\geq 70\%$	11 -18 mm	8 -12 mm	29 -38 mm

Key : (*) Corresponding WDCM numbers.

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 20-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (5,6).

Reference

- Mueller J. H. and Hinton J., 1941, Proc. Soc. Exp. Biol. Med., 48:330.
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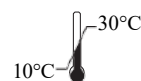
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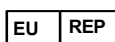
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package is damaged**

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Cooked Meat Medium, Modified (Revised as Cooked M Medium, M1870 Modified)

Intended Use:

Recommended for isolation of *Clostridium* species in accordance with FDA BAM, 1998.

Composition**

Ingredients	Gms / Litre
Part A	-
HMH Peptone B #	98.000
Proteose peptone	20.000
Dextrose (Glucose)	2.000
Sodium chloride	5.000
Part B	-
Tryptone	10.000
Sodium thioglycollate	1.000
Soluble starch	1.000
Neutral red	0.050
Final pH (at 25°C)	6.8±0.2

Equivalent to Beef heart, solids

**Formula adjusted, standardized to suit performance parameters

Directions

Part A: Add 1g directly into 20×150mm test tubes

Part B: Suspend 14.05 grams of Part B in 1000ml purified / distilled water.

Complete Medium: Transfer 15ml of Part B medium into the tube containing 1 gram of Part A. Allow to stand so that all the meat particles are rehydrated. Sterilize by autoclaving at 15lbs pressure (121°C) for 15minutes.

PrincipleAndInterpretation

Cooked Meat Medium, Modified is prepared in accordance with FDA BAM, 1998 (1) for the cultivation of *Clostridium* species, particularly *Clostridium perfringens* and *Clostridium botulinum* from food products. *Clostridium* is a large genus of gram-positive spore-bearing anaerobes that are normal inhabitants of the soil and are causative agents of food poisoning. Detection of *C. perfringens*, *C. sporogenes* and *Clostridium botulinum* is of significance because of their ability to produce enterotoxin alpha and botulinum toxins responsible for gas gangrene and botulinism. Cooked Meat Medium was initially developed by Robertson (6) for the cultivation of certain anaerobes isolated from wounds. The medium can be used when the inoculum strength is low and also for maintenance of cultures. This allows the growth of mixed cultures of bacteria without affecting the performance of the other (1).

Cooked Meat Medium contains HMH Peptone B, Proteose peptone which provides carbon, nitrogen substances, amino acids and other nutrients. HMH Peptone B also contains glutathione, a reducing substance that permits the growth of obligate anaerobes (5). The sulphhydryl groups, which impart reducing effect, are more available in denatured protein and hence cooked meat is added in the medium. Dextrose allows rapid and heavy growth of anaerobic bacteria in a short time. Sodium Thioglycollate lower the oxidation-reduction potential of the medium. Starch provides the complex carbohydrates that help the growth of anaerobes.

Growth in this medium is indicated by turbidity and/or colour change in the medium. *Clostridium perfringens* ferment dextrose, changing the colour of the medium from pink to yellow. Some are late fermenters. Blackening and disintegration of the meat particles indicate proteolysis. It is recommended to use the media in the day of preparation itself; otherwise it should be boiled or steamed for a few minutes and allowed to cool without agitation before inoculation. Inoculation should be made near the bottom of the tube in the meat particles for anaerobic cultures. Aerobes grow at the top whilst more anaerobic species grow deeper in the medium. Representative 25g of food sample is homogenized in 225ml peptone dilution fluids.

Appropriate dilutions are prepared and inoculated on TSC Agar for plate count of viable *C. perfringens*. Simultaneously 3 or 4 CMM tubes are inoculated with 2ml of homogenates solution as back up for preceding plating procedure. Incubation is carried out at 35°C for 24-48hrs and examined microscopically for morphology appearance as tennis racket shaped *Clostridium* cells.

Type of specimen

Food samples

Specimen Collection and Handling

For food samples, follow appropriate techniques for sample collection and processing as per guidelines (7). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. Further isolation on selective media is required.
2. For complete identification, biochemical and serological tests must be carried out.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Part A : Brown granules Part B : Light yellow to pink homogeneous free flowing powder

Colour and Clarity of prepared medium

Red coloured slightly opalescent supernatant over insoluble granules

Reaction

Reaction of medium [(6.67% w/v) Part A and (1.41% w/v) Part B] at 25°C. pH : 6.8±0.2

pH

6.60-7.00

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours under anaerobic conditions.

Organism	Inoculum (CFU)	Growth
<i>Clostridium perfringens</i> ATCC 12924	50-100	luxuriant
<i>Clostridium botulinum</i> ATCC 25763	50-100	luxuriant
<i>Clostridium sporogenes</i> ATCC 11437	50-100	luxuriant

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 15-25°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use.

Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques (3,4).

Reference

1. Collins, CH., Lyne, PM. and Grange, JM. 1985. Microbiological Methods.
2. FDA, U.S. 1998. Bacteriological Analytical Manual. 8 ed. Gaithersburg, MD: AOAC International.
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
4. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
5. MacFaddin, J. F. 1985. Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria vol. 1. Baltimore: Williams and Wilkins.
6. Robertson. 1916. J. Pathol. Bacteriol, 20(327).
7. Salfinger Y., and Tortorello M.L. , 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.

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Rapid Perfringens Medium Base (Twin pack)

M1898

Intended Use:

Recommended for rapid detection of *Clostridium perfringens* in food.

Composition**

Ingredients	g/ L
Part A	-
LM powder	70.000
Part B	-
Tryptone	15.13
Yeast extract	8.04
Dextrose (Glucose)	10.55
Sodium chloride	4.02
L-Cystine	0.51
Sodium thioglycollate	0.51
Resazurin sodium	0.001
Gelatin	60.00
Peptone	5.00
Dipotassium hydrogen phosphate	5.00
Iron (II) sulphate	0.50
Agar	0.755
Final pH (at 25°C)	7.0±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 70 grams of Part A in 500 ml purified / distilled water. Mix well and adjust the pH to 6.8. Sterilize by autoclaving at 15 lbs pressure (121°C) for 5 minutes. Cool to 45-50°C and aseptically add sterile rehydrated contents of one vial of PN Selective Supplement (FD307).

Suspend 110 grams of Part B in 500 ml warm purified / distilled water. Heat to boiling to dissolve the medium completely. Adjust the pH to 7.1. Dispense 5 ml amount in screw-capped glass tubes. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Aseptically add 5 ml of previously cooled Part A solution to Part B. Mix well and store at 2-8°C. Before use, liquefy the medium by placing the tubes in a water bath 45-50°C for 30 minutes.

Principle And Interpretation

Rapid Perfringens Medium Base is formulated by Erickson & Deibel (1) for the detection *Clostridium perfringens* in food (2). The Mesophilic spore forming anaerobes belonging to the genus *Clostridia* of food concern are Gram-positive, catalase negative, rods of varying sizes.

The medium can be used to initiate growth from small inocula and to obtain the highest viable count of Clostridia. Rapid Perfringens Medium Base is a liquid medium with a litmus milk base and is prepared in tubes. Selectivity is provided by the antibiotics Polymyxin B sulfate and neomycin sulfate, coupled with an incubation temperature of 46°C (3). Tryptone, yeast extract provides amino acids and other complex nitrogenous, carbonaceous substances and vitamin B complex. Glucose is an energy source. Sodium chloride maintains the osmotic equilibrium. Dibasic potassium phosphate acts as a buffer to control pH. Whereas L-cystine, an amino acid, also serves as source of essential growth factors. Sodium thioglycollate and L-cystine lower the oxidation reduction potential of the medium by removing oxygen to maintain a low pH. Sodium thioglycollate also helps to neutralize the toxic effects of mercurial preservatives (4,5).

Litmus Milk cultures, enzymes of *Clostridium perfringens* attack the proteins and carbohydrates of the milk producing a stormy fermentation with clotting and gas formation (6).

Type of specimen

Food samples.

Specimen Collection and Handling:

For food samples, follow appropriate techniques for sample collection and processing as per guidelines (7). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. Some strains may show poor growth due to nutritional variations.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Part A : Pinkish purple to grey homogeneous free flowing powder Part B : Cream to yellow homogeneous free flowing powder

Colour and Clarity of prepared medium

Light Brown coloured opaque solution in tubes.

Reaction

Reaction of 7.0% w/v of Part A + 11.0% w/v of Part B at 25°C. pH : 7.0±0.2

pH

6.80-7.20

Cultural Response

Cultural characteristics observed in an anaerobic atmosphere with added PN Selective Supplement (FD307) ,after an incubation at 46°C for 48 hours.

Organism	Inoculum (CFU)	Growth
<i>Clostridium perfringens</i> ATCC 13124 (00007*)	50-100	good - luxuriant with stormy fermentation
<i>Proteus mirabilis</i> ATCC 25933	50-100	good - luxuriant

Key : (*) Corresponding WDCM numbers.

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques (8,9).

Reference

1. Erickson, J.E. and Deibel, R.H. (1978) New medium for rapid screening and enumeration of *Clostridium perfringens* in foods. Appl. Environ. Microbiol. 36, 567-571.

2. Smith, M. and Mood, T.J. (1983) Direct testing of gelatin hydrolysis in rapid perfringens medium. J. Assoc. Off. Anal. Chem. 66, 1045-1046.
3. Handbook of Culture Media for Food and Water Microbiology, 3rd edition. Edited by Janet E.L. Corry, Gordon D.W. Curtis and Rosamund M. Baird.
4. Nungester, Hood and Warren, 1943, Proc. Soc. Exp. Biol. Med., 52: 287
5. Portwood, 1944, J. Bacteriol., 48: 255
6. Gainor C. and Wegemer D. E., Appl. Microbiol., 1954 March; 2(2): 95-97.
7. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.
8. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
9. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

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HiCrome® Chromogenic Coliform agar (CCA Agar)

M1991I

Intended Use

Recommended for detection of *Escherichia coli* and coliforms in water samples. The composition and performance criteria of this medium are as per the specifications laid down in ISO 9308-1:2014.

Composition**

ISO 9308-1:2014 Specification -Chromogenic Coliform agar (CCA Agar)

M1991I - HiCrome® Chromogenic Coliform agar (CCA Agar)

Ingredients	g / L	Ingredients	g / L
Enzymatic digest of casein	1.000	Tryptone #	1.000
Yeast extract	2.000	Yeast extract	2.000
Sodium chloride	5.000	Sodium chloride	5.000
Sodium dihydrogen phosphate, 2H ₂ O	2.200	Sodium dihydrogen phosphate, 2H ₂ O	2.200
Disodium hydrogen phosphate	2.700	Disodium hydrogen phosphate	2.700
Sodium pyruvate	1.000	Sodium pyruvate	1.000
Sorbitol	1.000	Sorbitol	1.000
Tryptophan	1.000	Tryptophan	1.000
Tergitol-7	0.150	Tergitol-7	0.150
6-chloro-3-indoxyl β-D-galactopyranoside	0.200	6-chloro-3-indoxyl β-D-galactopyranoside	0.200
5-bromo-4-chloro-3-indoxyl- β-D-glucuronic acid cyclohexyl ammonium salt, monohydrate (X-beta-G-glucuronide CHX salt)	0.100	5-bromo-4-chloro-3-indoxyl- β-D-glucuronic acid cyclohexyl ammonium salt, monohydrate (X-beta-G-glucuronide CHX salt)	0.100
IPTG (Isopropyl-β-D-thiogalactopyranoside)	0.100	IPTG (Isopropyl-β-D-thiogalactopyranoside) Agar	0.100
Agar	9.0 to 18.00	Final pH (at 25°C)	15.000
Final pH (at 25°C)	6.8±0.2		6.8±0.2

**Formula adjusted, standardized to suit performance parameters

Enzymatic digest of casein

Directions

Suspend 30.92 grams (the equivalent weight of dehydrated medium per litre) in 1000 ml purified/distilled water. Heat to boiling to dissolve the medium completely. **DO NOT AUTOCLAVE. DO NOT OVERHEAT.** Cool to 45-50°C. Mix well and pour into sterile Petri plates.

Principle And Interpretation

HiCrome® Chromogenic Agar is a selective medium recommended by ISO for enumeration of *Escherichia coli* and coliform bacteria (1). The medium contains three chromogenic substrates. The enzyme β-D-galactosidase produced by coliforms cleaves 6-chloro-3-indoxy 1-β-D-galactopyranoside to form pink to red coloured colonies (1). The enzyme β-D-glucuronidase produced by *E.coli*, cleaves 5-bromo-4chloro-3-indoxy 1-β-D-glucuronic acid (1) Colonies of *E.coli* give dark blue to violet coloured colonies due to cleavage of both the chromogens. The presence of the third chromogen IPTG enhances the colour reaction. Addition of L-Tryptophan improves the indole reaction thereby increasing the detection reliability.

Tryptone, sodium pyruvate and sorbitol provide nitrogenous substances, fermentable carbohydrate and other essential growth nutrients for the organisms. Phosphates buffer the medium. The media formulation helps even sub-lethally injured coliforms to recover and grow rapidly. Tergitol-7 inhibits gram-positive as well as some gram-negative bacteria other than coliforms (1). The medium is inoculated either by pour plate technique or by spreading the sample on the surface of plated medium. Membrane filter technique can also be used. To confirm *E.coli*, add a drop of Kovacs reagent on the dark blue to violet colony. Formation of cherry red colour indicates a positive reaction.

Type of specimen

Water samples.

Specimen Collection and Handling:

Processing (1)

Filtration:

Filter 100ml of the sample using membrane filter. The minimum volume for filtration should be 10ml (or dilution) so that to ensure even distribution of the bacteria on the membrane filter.

Incubation and differentiation:

After filtration place the membrane filter on HiCrome® Chromogenic Coliform agar (CCA Agar), ensuring that no air is trapped underneath, invert petri dish and incubate at $36^{\circ}\text{C} \pm 2$ for 21 ± 3 hours. Examine the colony on membrane filters for color change.

Confirmation : Biochemical and serological tests are performed for confirmation.

Warning and Precautions

Read the label before opening the container. The media should be handled by trained personnel only. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium.
2. Each lot of the medium has been tested for the organisms specified on the COA. It is recommended to users to validate the medium for any specific microorganism other than mentioned in the COA based on the user's unique requirement.
3. Further biochemical and serological test are necessary for confirmation.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Gelling

Firm, comparable with 1.5% Agar gel.

Colour and Clarity of prepared medium

Light yellow coloured opalescent gel forms in Petri plates

Reaction

Reaction of 3.09% w/v aqueous solution at 25°C . pH : 6.8 ± 0.2

pH

6.60-7.00

Cultural Response

Productivity: Cultural response observed after an incubation at $36^{\circ}\text{C} \pm 2$ for 21 ± 3 hours. Recovery rate is considered as 100% for bacteria growth on Reference medium - Soyabean Casein Digest Agar (Tryptone Soya Agar).

Selectivity: Cultural response observed after an incubation at $36^{\circ}\text{C} \pm 2$ for 21 ± 3 hours.

Specificity: Cultural response observed after an incubation at $36^{\circ}\text{C} \pm 2$ for 21 ± 3 hours.

Organism	Inoculum (CFU)	Growth	Recovery	Colour of Colony#
Productivity				
<i>Escherichia coli</i> ATCC 25922 (00013)*	50-100	luxuriant	$\geq 70\%$	dark blue to violet
<i>Escherichia coli</i> ATCC 8739 (00012)*	50-100	luxuriant	$\geq 70\%$	dark blue to violet
<i>Citrobacter freundii</i> ATCC 43864 (00006)*	50-100	luxuriant	$\geq 70\%$	pink to red

##*Klebsiella aerogenes* 50-100 luxuriant $\geq 70\%$ pink to red
ATCC 13048 (00175)*

Selectivity

Enterococcus faecalis $\geq 10^4$ inhibited
ATCC 19433 (00009)*

Specificity

Pseudomonas aeruginosa 10^3-10^4 growth - colourless
ATCC 10145 (00024)*

Key * : Corresponding WDCM numbers # : either on plate or membrane

Formerly known as *Enterobacter aerogenes*

Storage and Shelf Life

Store between 15-25°C in a tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques (2,3).

Reference

1. International Organization for Standardization. Water quality: Enumeration of *E.coli* and coliform bacteria. Part I- Membrane filtration methods for bacteria with low bacterial background flora. ISO 9308-1:2014.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W.(2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

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MacConkey Broth

MH083

Intended use

Recommended for the selective enrichment of *E.coli* from pharmaceutical products in accordance with the microbial limit testing by harmonized methodology of USP/EP/BP/JP.

Composition**

Ingredients	g / L
Gelatin peptone#	20.000
Lactose monohydrate	10.000
Dehydrated bile##	5.000
Bromo cresol purple	0.010
pH after sterilization (at 25°C)	7.3±0.2

**Formula adjusted, standardized to suit performance parameters
Pancreatic digest of gelatin ## Equivalent to Dehydrated Ox-bile

Directions

Suspend 34.51 grams (the equivalent weight of dehydrated medium per litre) in 1000 ml purified/ distilled water. Heat if necessary to dissolve the medium completely. Dispense into test tubes with inverted Durham tubes. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes or as per validated cycle.

Principle And Interpretation

MacConkey Broth is a modification of MacConkey Medium (1). Childs and Allen (2) demonstrated the inhibitory effect of neutral red and therefore substituted it by the less inhibitory bromocresol purple dye. BCP is more sensitive in recording pH variation in the medium. This medium is prepared in accordance with the harmonized method of USP/BP/JP (3,4,5)

Gelatin peptone provides essential growth nutrients. Lactose is the fermentable carbohydrate. Dehydrated bile inhibits gram-positive organisms. Bromocresol purple is the pH indicator in the medium, which turns yellow under acidic condition. Lactose fermenting organisms turn the medium yellow due to the acidity produced on lactose fermentation. The colour change of the dye is observed when the pH of the medium falls below 6.8. Lactose non-fermenting organisms like *Salmonella* and *Shigella* do not alter the appearance of the medium.

Transfer homogenate in Soyabean Casein Digest Medium (MH011) containing 1 gm or 1 ml of the preparation to be examined to 100 ml MacConkey Broth. Incubation is carried at 43°-45°C for 24-48 hours. For further isolation, subculture on MacConkey Agar (MH081). Growth of red generally non-mucoid colonies, sometimes surrounded by a reddish precipitation zone, indicates presence of coliforms.

Type of specimen

Pharmaceutical samples

Specimen Collection and Handling

For pharmaceutical samples, follow appropriate techniques for sample collection, processing as per guidelines (3-6).

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions:

Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium.
2. Each lot of the medium has been tested for the organisms specified on the COA. It is recommended to users to validate the medium for any specific microorganism other than mentioned in the COA based on the user's unique requirement.

3.Though the medium is recommended for selective isolation, further biochemical and serological testing must be carried out for further confirmation.

4.For further isolation, subculture on MacConkey Agar (MH081) is required.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to yellow with green tinge homogeneous free flowing powder

Colour and Clarity of prepared medium

Purple coloured clear to slightly opalescent solution in tubes

pH

7.10-7.50

Cultural Response

Growth Promotion is carried out in accordance with the harmonized method of USP/EP/BP/JP. For organisms not specified in pharmacopoeia, cultural response was observed after an incubation at 30-35°C for 18-48 hours.

Growth promoting properties

Clearly visible growth of microorganism comparable to that previously obtained with previously tested and approved lot of medium occurs at the specified temperature for not more than the shortest period of time specified inoculating ≤ 100 cfu (at 42-44°C for ≤ 24 hours).

Inhibitory properties

No growth of the test microorganism occurs for the specified temperature for not less than longest period of time specified inoculating ≥ 100 cfu(at 42-44°C for ≥ 48 hours).

Cultural Response

Cultural characteristics observed after an incubation at 30-35°C for 18-48 hours.

Organism	Inoculum (CFU)	Growth	Acid	Gas	Incubation temperature	Incubation period
Growth promoting						
<i>Escherichia coli</i> ATCC 8739 (00012*)	50 -100	luxuriant	positive reaction, yellow colour	positive reaction	42 -44 °C	≤ 24 hrs
Inhibitory						
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC 6538 (00032*)	$\geq 10^3$	inhibited			42 -44 °C	≥ 48 hrs
Additional Microbiological testing						
<i>Escherichia coli</i> ATCC 25922 (00013*)	50 -100	luxuriant	positive reaction, yellow colour	positive reaction	30 -35 °C	18 -24 hrs
# <i>Klebsiella aerogenes</i> ATCC 13048 (00175*)	50 -100	luxuriant	positive reaction, yellow colour	positive reaction	30 -35 °C	18 -24 hrs
<i>Salmonella Choleraesuis</i> ATCC 12011	50 -100	fair-good	negative reaction	negative reaction	30 -35 °C	18 -24 hrs
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> ATCC 25923 (00034*)	$\geq 10^3$	inhibited			30 -35 °C	≥ 48 hrs

Key :- (*) Corresponding WDCM numbers (#)

Formerly known as *Enterobacter aerogenes*

Storage and Shelf Life

Store between 10- 30°C in a tightly closed container and the prepared medium at 15-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (7,8).

Reference

1. MacConkey A. T., 1900, The Lancet, ii: 20.
2. Childs E. and Allen, 1953, J. Hyg: Camb. 51:468-477.
3. The United States Pharmacopoeia-National Formulary (USP-NF), 2022.
4. British Pharmacopoeia, 2022, The Stationery office British Pharmacopoeia
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6. European Pharmacopoeia, 2022 European Dept. for the Quality of Medicines
7. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition
8. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

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Sterile Mineral Oil

R045

Intended use

Sterile Mineral Oil is used as a sealant to create an anaerobic environment in biochemical tests . It is also recommended for preservation of microorganism

Composition**

Ingredients

Sterile Mineral Oil

Directions

1. Overlay each inoculated tube with sterile mineral oil (0.5-1cm).
2. Tighten the caps of inoculated, overlaid tubes and incubate at appropriate temperature.

Principle And Interpretation

Mineral oils are usually seen as a mixture of liquid hydrocarbons. It is derived from crude oil by distillation and refining. Sterile mineral oil is recommended to overlay in biochemical tests such as decarboxylase, oxidation and fermentation reactions. It is also used in preservation of microorganisms.

Type of specimen

Biological sample

Specimen Collection and Handling

Follow appropriate techniques for handling specimens as per established guidelines

Warning and Precautions

Non In Vitro diagnostic use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. It fails to prevent changes in the characteristics of a strain due to the development of variants and mutants
2. Once vial opened it has to be used or preserved carefully otherwise it will get slowly contaminated with microorganisms.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature

Quality Control

- **Appearance** : Colourless viscous solution.

- **Clarity** : Clear with no insoluble particles.
- **Sterility Testing** : Sterility of the mineral oil was checked by inoculating 1 ml mineral oil in 100 ml sterile Soyabean Casein Digest Medium (M011) and Alternate Thioglycollate Medium (M010).Incubate at 30-35°C for 14 days.
- **Results** : Absence of turbidity (clear medium) after 14 days at 30-35°C.

Storage and Shelf Life

On receipt store between 10-30°C in tightly closed container and away from bright light. Use before expiry date on label. On opening, product should be properly stored in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques .

Reference

1. Biochemical Tests for the Identification of Aerobic Bacteria. (2016). Clinical Microbiology Procedures Handbook, 3.17.1.1–3.17.48.3.
2. Murray, P.R., E.J. Baron, J.H. Jorgensen, M.L. Landry, and M.A. Pfaller. 2007. Manual of Clinical Microbiology. 9th ed. ASM Press, Washington, D.C.



Storage temperature



Do not use if package is damaged



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C-40,21/Y, MIDC, Wagle Ind Area,
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Acid Phosphatase Reagent

R096

Intended use

Acid Phosphatase Reagent is used for the confirmation of *Clostridium perfringens* isolated from water. The composition and performance criteria of this reagent are as per the specifications laid down in ISO 14189:2013.

Composition**

Ingredients

Composition is as per the specifications laid down in ISO 14189:2013

1-naphthylphosphate disodium salt	0.20 gm
Fast Blue B Salt (o-Dianisidine bis(diazotized)Zinc double salt)	0.40 gm
Acetate buffer	10.0 ml

**Formula adjusted, standardized to suit performance parameters

Directions

1. Smear some growth of 24 hours old culture of *Clostridium perfringens* from Blood Agar / Columbia Agar Base / Tryptone Soya Agar (incubated anaerobically at 34-38°C) on the filter paper.
2. Add 2-3 drops of Acid phosphatase Reagent (R096) on to the colonies of filter paper.
3. Observe for appearance of strong purplish colour developed within 3-4 min which is positive reaction.

Note: On standing precipitate may develop, if desired reagent can be filtered to remove precipitate and the filtered reagent can be used for test.

4. Due to inherit ant composition of product froth may be developed which will not affect the performance criteria of the reagent.

Principle And Interpretation

It is an alternative method for the confirmation of *C. perfringens* based upon the expression of acid phosphatase enzyme. Acid Phosphatase catalyzes the hydrolysis of alpha-naphthylphosphate, liberating the alpha-naphthol and phosphate. which forms an azo dye with diazonium o - dianisidine, that has a strong absorbance at 405 nm. The increase in absorbance is directly proportional to the level of acid phosphatase enzyme. A positive reaction for acid phosphatase was recorded if a strong purple colour developed within 3-4 min of the reagent being placed on a colony.

Type of specimen

Water samples

Specimen Collection and Handling

For water samples, follow appropriate techniques for sample collection, processing as per guidelines and local standards.

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic Use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets

Limitations

1. For further identification confirmatory test is highly recommended.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature

Quality Control

- **Appearance** : Light yellow to brown colour solution
- **Clarity** : Hazy solution with precipitate. Note : Precipitate will not affect the performance criteria of the reagent.
- **Cultural Response** :

Organism	Acid Phosphatase
Cultural Response	Smear some growth of 24 hours old culture of <i>Clostridium perfringens</i> from Blood Agar / Columbia Agar Base / Tryptone Soya Agar (incubated anaerobically at 34-38°C) on the filter paper. Add 2-3 drops of Acid phosphatase Reagent (R096) on to the colonies of filter paper.
<i>Clostridium perfringens</i> ATCC 13124 (WDCM00007)	Strong purple colour developed within 3-4 min
<i>Bacillus spizizenii</i> ATCC 6633 (WDCM 00003)	No purple colour developed within 3-4min

Storage and Shelf Life

Store between 2-8°C in a tightly closed container and away from bright light. Use before expiry date on the label. On opening, product should be stored in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques.

Reference

1. Evaluation of acid phosphatase as a confirmation test for *Clostridium perfringens* isolated from water, Sartory DP, Waldoock R, Davies CE, Field AM., Lett Appl Microbiol. 2006 Apr;42(4):418-24.
2. I senberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Vol.1 Clinical Microbiology, 11th Edition.
4. Water quality - Enumeration of *Clostridium perfringens*- method using membrane filtration. ISO14189



Storage temperature



Do not use if package is damaged



HiMedia Laboratories Pvt Limited
C-40,21/Y, MIDC, Wagle Ind Area,
Thane(W)-400604,Maharashtra,India

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Fetal Bovine Serum

Origin: South America, EU Approved
Sterile Filtered,
Heat Inactivated

Product Code: RM9955

Product Description:

Fetal bovine serum (FBS) is a ubiquitously used essential supplement in cell culture media. FBS is a cocktail of proteins, vitamins, carbohydrates, lipids, hormones, growth factors, minerals and trace elements and is used as an universal growth supplement effective for most types of human and animal (including insect) cells. The major functions of serum in culture media are to provide:

- (i) Hormonal factors stimulating cell growth and proliferation and promoting differentiated functions.
 - (ii) Transport proteins carrying hormones (e.g. transcortin), minerals and trace elements and lipids (e.g. lipoproteins)
 - (iii) Attachment and spreading factors, acting as germination points for cell attachment.
 - (iv) Stabilising and detoxifying factors needed to maintain pH or to inhibit proteases either directly, such as α -antitrypsin or α 2-macroglobulin, or indirectly, by acting as an unspecific sink for proteases and other (toxic) molecules.
- RM9955 is heat inactivated Fetal bovine serum. Heat inactivation is done to destroy heat labile components such as complement that can lead to complement mediated cell lysis. Complement proteins, antibodies and enzymes present in the serum are inactivated by heat inactivation.

Applications of Heat inactivated Serum:

- Suitable for immunoassays, enzyme assays and cytotoxicity assays
- For culture of insect cells

Note: Heat inactivation process can be detrimental to the growth promoting capacity of serum. When heat inactivation of serum is done, along with the complement certain amino acids, vitamins and growth factors are subjected to temperatures that could cause degradation. Hence it is recommended that researcher should experimentally determine and document the reasons for using heat inactivated serum.

RM9955 is sourced in countries approved for import into the European Union by European Commission. Currently this includes Central and South America, USA, Canada, Australia, New Zealand and South Africa. This serum is collected and processed in facilities registered and inspected by the competent authority in the country of origin. EU approved serum can be freely moved between EU member countries and many other countries outside of Europe where the USDA or FDA regulations are not required.

Directions for Thawing of Serum:

Thawing of the sera should be done as quickly as possible in order to minimize the period of time during which elevated salt concentration prevail in the thawed liquid.

1. Remove the bottles from the freezer and allow them to acclimatize at room temperature for 10 minutes and keep in 2-8°C overnight in refrigerator.
Note: Do not place the serum in the water bath or incubator. Avoid exposing serum to elevated temperatures as this can lead to degradation of heat labile nutrients.
2. Swirl the bottle of serum frequently during thawing to disperse the released salts and proteins uniformly in the liquid.

Note on Cryoprecipitate:

We advise our users to follow the recommended thawing procedure. Proper thawing with periodic agitation is crucial to a serum's optimum performance. If bottle of serum is not frequently swirled during thawing, the released proteins and salts tend to form crystalline or flocculent precipitates. These cryoprecipitates are not detrimental to the performance of serum but might affect serum's appearance and consistency.

Slight turbidity or small amount of flocculent material is normal in most serum products and will not affect its performance in any manner. Filtering serum to remove cryoprecipitate is not recommended and could result in loss of nutrients.

Quality Control:

Physical and Chemical analysis:

Appearance	: Amber liquid.
pH	: 6.8 - 8.2
Osmolality	: 280 - 340 mOsm/Kg H ₂ O
Endotoxin	: Value EU/ml
Hemoglobin	: < 20mg/dl
Identity	: Typical

Protein:

Total protein	: 3.0 - 4.5 g/dl
Albumin	: value g/dl
α-Globulin	: value g/dl
β-Globulin	: value g/dl
γ-Globulin	: value g/dl
IgG	: NMT 250µg/ml

Sterility Testing:

Aerobic bacteria	: Not detected
Anaerobic bacteria	: Not detected
Fungi	: Not detected
Mycoplasma	: Not detected

Virus testing:

Bovine Virus Diarrhea Virus (BVD-V)	: Not detected
Bovine Herpes Virus 1 (BHV-1)	: Not detected
Parainfluenza Type 3 (PI-3)	: Not detected

Antibody testing:

BVD-1 Antibody titer	: Not detected
BVD-2 Antibody titer	: Not detected

Growth promotion and cytotoxicity:

Each lot of serum is tested for growth promotion and cytotoxicity. Growth promotion ability of serum is assessed by supplementing medium with 10% serum and analyzing the cell lines qualitatively for morphology and qualitatively by estimating cell counts through minimum three subcultures.

Storage and Shelf Life:

Store at -10°C to -40°C away from bright light.

Shelf life of the product is 60 months.

Thawed serum can be stored at 2- 8°C up to four weeks.

Multiple freeze thaw cycles should be avoided.

Serum should never be stored in frost free

freezers. Frost free appliance undergoes intermittent

warming cycles to prevent ice deposits and this might

lead to multiple thawing of serum.

To avoid multiple free thaw cycles or long periods

of refrigeration, we recommend freezing small aliquots

which can be thawed and used as required.

Use before expiry date given on the label.

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Novobiocin NV 5 mcg

SD121

Novobiocin NV 5 mcg discs are used for antimicrobial susceptibility testing of bacterial cultures as per Kirby-Bauer Method

Composition

*Ingredients	Concentration
Novobiocin	5 mcg/disc

Susceptibility Test Procedure:

1. Prepare plates with Mueller Hinton Agar (M173/M1084) for rapidly growing aerobic organisms as per Kirby-Bauer Method. The medium in the plates should be sterile and should have a depth of about 4 mm.
2. Inoculate 4-5 similar colonies with a wire, needle or loop to 5 ml Tryptone Soya Broth (M011) and incubate at 35-37°C for 2-8 hours until light to moderate turbidity develops. Compare the inoculum turbidity with that of standard 0.5 McFarland (prepared by mixing 0.5 ml of 1.175% barium chloride and 99.5 ml of 0.36N sulfuric acid). Dilute the inoculum or incubate further as necessary to attain comparative turbidity. Alternatively, the inoculum can be standardized by other appropriate optical method (0.08 - 0.13 OD turbid suspension at 625 nm)
3. Dip a sterile non-toxic cotton swab on a wooden applicator into the standardized inoculum and rotate the soaked swab firmly against the upper inside wall of the tube to express excess fluid. Streak the entire agar surface of the plate with the swab three times, turning the plate at 60° angle between each streaking. Allow the inoculum to dry for 5 - 15 minutes with lid in place.
4. Apply the discs using aseptic technique. When using cartridges, the discs can be applied using the specially designed applicator. When the vials are used, apply the discs using sterile forceps.
5. Deposit the discs with centers at least 24 mm apart. For fastidious organisms and for Penicillins and Cephalosporins, the discs should preferably be deposited with centers 30 mm apart.
6. Incubate immediately at 35 ± 2°C and examine after 16-18 hours or longer, if necessary. For fastidious organisms incubate at appropriate temperature and time.
7. Measure the zones showing complete inhibition and record the diameters of the zones to the nearest millimeter using a calibrated instrument like zone scales (PW096/PW297)

Principle:

Antimicrobial susceptibility testing (AST) of bacterial and fungal isolates is a common and important technique in most clinical laboratories. The results of these tests are used for selection of the most appropriate antimicrobial agent(s) for treatment against the infectious organisms. Till the 1950s, laboratories were lacking in the methodologies and equipments for the accurate determination of in vitro responses of organisms to antimicrobial agents. Bauer et al (1) began the development of standardized methods for antimicrobial susceptibility testing, using disc diffusion system. However the susceptibility results may not always correlate with the patient's response to therapy. The response of an infected patient to antimicrobial agent(s) is a complex interrelationship of host responses, drug dynamics and microbial activity. Antimicrobial susceptibility tests are either quantitative or qualitative. Disc diffusion test is a qualitative test method. The National Committee for Clinical Laboratory Standards (NCCLS), now known as Clinical Laboratory Standards Institute (CLSI) has published comprehensive documents regarding the disc diffusion systems. The agar disc diffusion test is the most convenient and widely used method for routine antimicrobial susceptibility testing. In subsequent and current practice, antimicrobial impregnated paper discs are applied onto the agar surface. Based on the Bauer-Kirby Method, standardized reference procedures for the disc systems were published by WHO and FDA and are periodically updated by the CLSI (formerly NCCLS)(2). For any antimicrobial testing, Quality control or clinical testing, the method to be followed is the same as mentioned above.

However few precautions are to be maintained while handling of the Sensitivity discs,

- On receipt the discs are to be immediately stored at the recommended temperature.
- Medium preparation, Inoculum preparation and incubation to be done as specified.

Quality Control:

Appearance: Filter paper discs of 6mm diameter with printed "NV 5" on centre of each side of the disc.

Cultural response: Average diameter of zone of inhibition observed on Mueller Hinton Agar (M173) after 18 hours incubation at 35-37°C for standard cultures.

Organisms (ATCC)	Std. zone of diameter (mm)
<i>S.aureus</i> (25923)	22-31

Storage and Shelf-life:

Discs should always be stored at -20°C to +8°C under dry conditions, along with the dessicator provided in individual pack. Use before expiry date on the label.

References:

1. Bauer, Kirby, Sherris and Turck, 1966, Am. J. Clin. Path., 45: 493
2. Performance standards of Antimicrobial Disc Susceptibility Tests, M100S, 32nd Ed., CLSI Vol. 42 No.2, Feb-2022.
3. EUCAST, Breakpoint tables for interpretation of MIC's & zone diameters, version 12.0, valid from 01.01.2022.

Note :

Use following media to carry out susceptibility test

For rapidly growing aerobic organisms : Mueller Hinton Agar (M173/M1084)

For *Haemophilus* spps : Haemophilus Test Agar (M1259 + FD117)

For *S.pneumoniae* : Muller Hinton Agar supplemented with 5% Sheep Blood

For Neisseria spps : G.C.Agar +1% defined growth supplement (M434 + FD025)

* Not for Medicinal Use



In vitro diagnostic medical device



CE Marking



Storage temperature



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HiMedia Laboratories Pvt. Limited,
C-40, Road No.21Y, MIDC, Wagle
Industrial Area, Thane (W)
-400604, MS, India



CE Partner 4U ,Esdoornlaan 13, 3951
DB Maarn The Netherlands,
www.cpartner4u.eu

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