



# ATCC® derived CultiControl

## Technical Sheet 01

**CultiControl** freeze-dried microorganisms

Packaging: 1 vial containing 5 pellets

Non-enumerated CFU

Applications: Culture purposes, QC of ID devices, QC of AST devices

### BioSafety Levels valid for our ATCC® derived microorganisms

The Liofilchem® CultiControl freeze-dried microorganisms have a BioSafety level (BSL) of 1 or 2.

BSL 1 organisms have no, or low, risk to individuals and communities. BSL 1 organisms may cause disease in individuals with immune systems that are suppressed or compromised.

BSL 2 organisms pose a moderate risk of individual infection, but low risk of community infection.

Liofilchem adheres to the BSL level designation as determined by the Reference Culture Collection from which the microorganism strain was obtained. Responsibility for safe handling of biological agents ultimately rests with the user. All infectious materials should be handled under the supervision of a competent and knowledgeable microbiologist.

### Recommended Growth Methods

Primary growth on a nonselective agar medium is preferred. Primary growth in a fluid medium should only occur in special instances or when recommended. Because of the manipulations required during hydration, it is difficult to obtain purity of a lyophilized strain in a fluid medium. A contaminant may completely overgrow and obscure the presence of the lyophilized strain.

A list of microorganisms and relevant Recommended Growth Method is showed at page 4.

#### Method 1

Tryptic Soy Agar (Soybean Casein Digest Agar), nonselective Sheep Blood Agar, Standard Methods Agar (Plate Count Agar) or Nutrient Agar - 35°C in aerobic atmosphere – 24 to 48 hours.

#### Method 2

Nonselective Sheep Blood Agar - 35°C in aerobic atmosphere – 24 to 72 hours. Growth of some species such as *Streptococcus* and *Arcanobacterium* are enhanced by CO<sub>2</sub> enrichment of the incubation atmosphere. 5% CO<sub>2</sub> is recommended for the culture of *Streptococcus pneumoniae* and other streptococcal species of the viridians group.

### Method 3

Chocolate Agar - 35°C in 5% to 7% CO<sub>2</sub> – 24 to 48 hours.

### Method 4

Anaerobic Blood Agar 35°C in Anaerobic Environment – 48 to 72 hours.

Some obligate anaerobes may require 5 to 7 days to demonstrate sufficient growth.

Fresh prepared Nutrient Agar, Tryptic Soy Agar (Soybean Casein Digest Agar), Standard Methods Agar (Plate Count Agar) are appropriate alternatives for some *Clostridium* species together with an additional period (24 hours) of incubation.

### Method 5

Sabouraud Dextrose Emmons Agar - 25°C in aerobic atmosphere – 2 to 7 days.

Nonselective Sheep Blood Agar is an appropriate alternative.

Nutrient Agar, Tryptic Soy Agar, Potato Dextrose Agar and Standard Plate Count Agar are appropriate alternatives together with an additional period (24 hours) of incubation.

Sabouraud Dextrose Emmons Agar is the best medium for growth of *Saccharomyces* sp.

### Method 6

Chocolate Agar - 35°C in Microaerophilic Environment – 48 to 72 hours.

### Method 7

Lowenstein Jensen Agar or Middlebrook Agar - 35°C in 5 to 7% CO<sub>2</sub> or aerobic atmosphere – up to one week. *M. fortuitum* subsp. *fortuitum*, *M. peregrinum* and *M. smegmatis* will also grow on Tryptic Soy Agar (Soybean Casein Digest Agar) as well as Lowenstein Jensen and Middlebrook Agar but additional incubation time may be required.

### Method 8

Buffered Charcoal Yeast Extract Agar - 35°C in aerobic atmosphere – 3 to 5 days.

### Method 9

V Agar or Chocolate Agar - 35°C in 5% to 7% CO<sub>2</sub>– 48 hours.

### Method 10

Rehydrate in sterile Brain Heart Infusion Broth, Tryptic Soy Broth (Soybean Casein Digest Agar) or 0.85% Saline. Rehydration with water may result in decreased or no recovery. Grow on Tryptic Soy Agar (Soybean Casein Digest Agar) - 35°C in aerobic atmosphere – 24 to 48 hrs. *Vibrio* sp. also grows on Marine Agar.

### Method 11

The primary growth medium is MRS (Man, Rogosa, Sharpe) Broth. Incubate at 35°C in aerobic atmosphere for 48 hours. Transfer to either Columbia CNA with Sheep Blood or Tryptic Soy Agar with Sheep Blood. Incubate at 35°C in 5 to 7% CO<sub>2</sub> for 48 hrs. A few *Lactobacilli* species, such as *L. fermentum*, *L. paracasei* subsp. *paracasei*, *L. plantarum*, *L. rhamnosus*, and *L. sakei*, do not need to be started in Lactobacilli MRS broth. They may be plated directly to Columbia CNA with Sheep Blood or Tryptic Soy Agar with Sheep Blood and incubated at 35°C in 5 to 7% CO<sub>2</sub> for 48 hours.

#### Method 12

Potato Dextrose Agar - 55 C in aerobic atmosphere – 24 to 48 hours.

#### Method 13

Rehydrate 1 pellet of *M. hominis* or *Ureaplasma* sp. in 10B Arginine Broth. Make serial dilutions (for example, 1:10, 1:100, 1:1000, 1:10,000). Incubate at 35 C in aerobic atmosphere. As soon as the Arginine vial turns pink (24 to 48 hours), sub 0.1 mL of broth to A8 Agar and streak for isolation. Do not use cotton swab or wooden shaft. Incubate mycoplasma at 35°C in 5 to 7% CO<sub>2</sub>. Incubate ureaplasma at 35°C anaerobically for up to 96 hours. In order to see colonies, examine plates microscopically.

#### Method 14

Rehydrate 1 pellet of *M. pneumoniae* in SP4 Glucose Broth. Make serial dilutions (for example, 1:10, 1:100, 1:1000, 1:10,000). Incubate at 35°C in aerobic atmosphere. As soon as the broth turns from red to yellow (1-4 weeks), sub 0.2 mL of broth to SP4 Glucose Agar and streak for isolation. Do not use cotton swab or wooden shaft. Incubate at 35°C in CO<sub>2</sub> atmosphere, preferably in a candle jar, for 5 to 15 days. In order to see colonies, examine plates microscopically.

#### Method 15

Rehydrate 1 pellet of *M. orale* in 10B Arginine Broth. Make serial dilutions (for example, 1:10, 1:100, 1:1000). Incubate at 35°C, in aerobic atmosphere. As soon as the broth turns from yellow to pink (48 to 72 hours), sub 0.2 mL of broth to SP4 Glucose Agar and streak for isolation. Do not use cotton swab or wooden shaft. Incubate plates at 35°C in anaerobic conditions for 3 to 6 days. In order to see colonies, examine plates microscopically.

#### Method 16

Leeming Notman Agar - 30°C in aerobic atmosphere – 72 hours.

#### Method 17

Rehydrate 1 pellet of *M. gallisepticum* in SP4 Glucose Broth. Make serial dilutions (for example, 1:2, 1:4). Incubate at 35°C in aerobic atmosphere. As soon as the broth turns from red to yellow (4 days to 2 weeks), sub 0.2 mL of broth to SP4 Glucose Agar and streak for isolation. Do not use cotton swab or wooden shaft. Incubate at 35°C in CO<sub>2</sub> atmosphere, preferably in a candle jar, for 3 days to 2 weeks. In order to see colonies, examine plates microscopically.

#### Method 18

Rehydrate 1 pellet of *M. hyorhinae* in SP4 Glucose Broth. Make serial dilutions (for example, 1:10, 1:100, 1:1000). Incubate at 35°C in aerobic atmosphere. As soon as the broth turns from red to yellow (4 days to 2 weeks), sub 0.2 mL of broth to SP4 Glucose Agar and streak for isolation. Do not use cotton swab or wooden shaft. Incubate at 35°C in CO<sub>2</sub> atmosphere, preferably in a candle jar, for 2 to 10 days. In order to see colonies, examine plates microscopically.

#### Method 19

Rehydrate 1 pellet of *M. synoviae* in SP4 Glucose Broth. Make serial dilutions (for example, 1:2, 1:4, 1:8, 1:16, 1:32). Incubate at 35°C in 5 to 10% CO<sub>2</sub> for 7 days. After 7 days (no color change will be noted), sub 0.2 mL of broth to SP4 Glucose Agar and streak for isolation. Do not use cotton swab or wooden shaft. Incubate at 35°C in CO<sub>2</sub> atmosphere, preferably in a candle jar, for 1 to 4 weeks. In order to see colonies, examine plates microscopically.

#### Method 20

Chocolate agar, Sheep Blood Agar, Tryptic Soy Agar, Bordet Gengou Agar with 15% Defibrinated Sheep Blood - 35°C in aerobic atmosphere – 24 to 48 hours. Standard Methods (Plate Count Agar) or Nutrient Agar are appropriate alternatives together with an additional period (24 hours) of incubation.

### Method 21

Chocolate or Bordet Gengou Agar with 15% Defibrinated Sheep Blood - 35°C in aerobic atmosphere – 2 days to one week. *B. pertussis*, and *B. pertussis*, require Bordet Gengou Agar with 15% Defibrinated Sheep Blood.

### Method 22

Prepare ISF (modified Infant Soy Formula) Broth using the following steps: 1) fill tubes with 10 mL Infant Soy Formula, 2) place a four-penny nail in each tube, and 3) sterilize the broth. Infant Soy Formula may be purchased at a grocery store. A four-penny nail is approximately 1.5 inches or 38 mm in length. It should contain steel or iron.

Inoculate ISF Broth with one pellet. Make two dilutions, 1:10 and 1:100. Plate undiluted sample and plate the 1:10 and 1:100 dilutions. It is necessary to plate the diluted samples because at higher concentrations the colonies are pin-point which makes colony characteristics difficult to see. Grow at 55°C in anaerobic conditions for 48 hours. The broth will turn grey, indicating growth. Sub with a swab to Sulfite Agar. Sulfite Agar is used for detecting thermophilic anaerobes which produce sulfite. Incubate the agar in anaerobic environment at 55°C for 7 days.

### Method 23

Inoculate Mycoplasma Broth with a pellet. Prepare serial dilutions of 1:10, 1:100, and 1:1000 using the broth. Incubate at 35°C for 48 hours. Then plate 0.2 mL of the turbid broth culture to Mycoplasma Agar. Incubate agar in 5 to 7% CO<sub>2</sub> at 35°C for 3 to 7 days. Do not use cotton swabs or wooden sticks. In order to see colonies, examine plates microscopically.

### Method 24

Sheep Blood Agar supplemented with Pyridoxal - 35°C in 5% to 7% CO<sub>2</sub> – 24 to 48 hours.



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WDCM				CultiControl Ref.	notes	IVD according to 98/79/EC	BioSafety Level	Recommended growth method
	<i>Acinetobacter baumannii</i>	derived from	ATCC® 19606 <sup>TM</sup> *	89174		✓	2	1
	<i>Acinetobacter baumannii</i>	derived from	ATCC® BAA-747 <sup>TM</sup> *	89141		✓	2	1
	<i>Actinomyces odontolyticus</i>	derived from	ATCC® 17929 <sup>TM</sup> *	89114		✓	2	4
	<i>Aeromonas hydrophila</i>	derived from	ATCC® 35654 <sup>TM</sup> *	89169		✓	2	2
63	<i>Aeromonas hydrophila</i>	derived from	ATCC® 7966 <sup>TM</sup> *	89119		✓	2	2
	<i>Aggregatibacter aphrophilus</i>	derived from	ATCC® 7901 <sup>TM</sup> *	89091		✓	2	3
53	<i>Aspergillus brasiliensis</i>	derived from	ATCC® 16404 <sup>TM</sup> *	89021		✓	1	5
	<i>Bacillus cereus</i>	derived from	ATCC® 10876 <sup>TM</sup> *	89155		✓	1	1
1	<i>Bacillus cereus</i>	derived from	ATCC® 11778 <sup>TM</sup> *	89022		✓	1	1
3	<i>Bacillus subtilis subsp. spizizenii</i>	derived from	ATCC® 6633 <sup>TM</sup> *	89023		✓	1	1
	<i>Bacteroides fragilis</i>	derived from	ATCC® 23745 <sup>TM</sup> *	89113		✓	2	4
	<i>Bacteroides fragilis</i>	derived from	ATCC® 25285 <sup>TM</sup> *	89078		✓	2	4
	<i>Bacteroides ovatus</i>	derived from	ATCC® 8483 <sup>TM</sup> *	89111		✓	2	4
	<i>Bacteroides ovatus</i>	derived from	ATCC® BAA-1296 <sup>TM</sup> *	89193		✓	2	4
	<i>Bacteroides thetaiotaomicron</i>	derived from	ATCC® 29741 <sup>TM</sup> *	89079		✓	2	4
	<i>Bordetella bronchiseptica</i>	derived from	ATCC® 4617 <sup>TM</sup> *	89139		✓	2	15
	<i>Burkholderia cepacia</i>	derived from	ATCC® 25416 <sup>TM</sup> *	89147		✓	2	1
	<i>Burkholderia cepacia</i>	derived from	ATCC® 25608 <sup>TM</sup> *	89166		✓	2	1
156	<i>Campylobacter jejuni subsp. jejuni</i>	derived from	ATCC® 29428 <sup>TM</sup> *	89167		✓	2	6
5	<i>Campylobacter jejuni subsp. jejuni</i>	derived from	ATCC® 33291 <sup>TM</sup> *	89086		✓	2	6
	<i>Campylobacter jejuni subsp. jejuni</i>	derived from	ATCC® 33560 <sup>TM</sup> *	89145		✓	2	6
54	<i>Candida albicans</i>	derived from	ATCC® 10231 <sup>TM</sup> *	89024		✓	1	5
	<i>Candida albicans</i>	derived from	ATCC® 14053 <sup>TM</sup> *	89183		✓	1	5
	<i>Candida albicans</i>	derived from	ATCC® 18804 <sup>TM</sup> *	89177		✓	1	5
	<i>Candida albicans</i>	derived from	ATCC® 64124 <sup>TM</sup> *	89178		✓	1	5
	<i>Candida albicans</i>	derived from	ATCC® 90028 <sup>TM</sup> *	89072		✓	1	5
	<i>Candida krusei</i>	derived from	ATCC® 14243 <sup>TM</sup> *	89098		✓	1	5
	<i>Candida parapsilosis</i>	derived from	ATCC® 22019 <sup>TM</sup> *	89071		✓	1	5
	<i>Candida tropicalis</i>	derived from	ATCC® 750 <sup>TM</sup> *	89097		✓	1	5
	<i>Citrobacter freundii</i>	derived from	ATCC® 43864 <sup>TM</sup> *	89146		✓	1	1
	<i>Citrobacter freundii</i>	derived from	ATCC® 8090 <sup>TM</sup> *	89159		✓	1	1
	<i>Clostridium difficile</i>	derived from	ATCC® 9689 <sup>TM</sup> *	89090	produces cytotoxin	✓	2	4
	<i>Clostridium histolyticum</i>	derived from	ATCC® 19401 <sup>TM</sup> *	89112		✓	2	4
7	<i>Clostridium perfringens</i>	derived from	ATCC® 13124 <sup>TM</sup> *	89053		✓	2	4
	<i>Clostridium sordellii</i>	derived from	ATCC® 9714 <sup>TM</sup> *	89059		✓	2	4
8	<i>Clostridium sporogenes</i>	derived from	ATCC® 19404 <sup>TM</sup> *	89095		✓	1	4
	<i>Cronobacter muytjensii</i>	derived from	ATCC® 51329 <sup>TM</sup> *	89158		✓	1	1
214	<i>Cronobacter sakazakii</i>	derived from	ATCC® 29544 <sup>TM</sup> *	89138	formerly Enterobacter sakazakii	✓	1	1
	<i>Eikenella corrodens</i>	derived from	ATCC® BAA-1152 <sup>TM</sup> *	89196		✓	2	3
175	<i>Enterobacter aerogenes</i>	derived from	ATCC® 13048 <sup>TM</sup> *	89156		✓	1	1
	<i>Enterobacter cloacae subsp. cloacae</i>	derived from	ATCC® 49141 <sup>TM</sup> *	89200		✓	1	1
	<i>Enterobacter cloacae subsp. cloacae</i>	derived from	ATCC® BAA-1143 <sup>TM</sup> *	89065	control strain for the AmpC disk test; strong positive	✓	2	1
	<i>Enterococcus casseliflavus</i>	derived from	ATCC® 700327 <sup>TM</sup> *	89195		✓	1	1
9	<i>Enterococcus faecalis</i>	derived from	ATCC® 19433 <sup>TM</sup> *	89025		✓	2	1
87	<i>Enterococcus faecalis</i>	derived from	ATCC® 29212 <sup>TM</sup> *	89026		✓	2	1

WDCM				CultiControl Ref.	notes	IVD according to 98/79/EC	BioSafety Level	Recommended growth method
210	<i>Enterococcus faecalis</i>	derived from	ATCC® 33186™*	89115		✓	2	1
	<i>Enterococcus faecalis</i>	derived from	ATCC® 49532™*	89066	high level Gentamicin-resistant and Streptomycin-sensitive	✓	2	1
	<i>Enterococcus faecalis</i>	derived from	ATCC® 49533™*	89067	high level Gentamicin-sensitive and Streptomycin-resistant	✓	2	1
85	<i>Enterococcus faecalis</i>	derived from	ATCC® 51299™*	89173	Vancomycin resistant and high level aminoglycosides, vanB	✓	2	1
10	<i>Enterococcus faecium</i>	derived from	ATCC® 19434™*	89171		✓	2	1
	<i>Enterococcus faecium</i>	derived from	ATCC® 51559™*	89117		✓	2	1
	<i>Enterococcus faecium</i>	derived from	ATCC® 6057™*	89152		✓	2	1
	<i>Enterococcus faecium</i>	derived from	ATCC® BAA-2319™*	89172	vanA resistance	✓	2	1
	<i>Erysipelothrix rhusiopathiae</i>	derived from	ATCC® 19414™*	89187		✓	2	2
	<i>Escherichia coli</i>	derived from	ATCC® 11303™*	89184		✓	1	1
13	<i>Escherichia coli</i>	derived from	ATCC® 25922™*	89027		✓	1	1
	<i>Escherichia coli</i>	derived from	ATCC® 35218™*	89163	beta lactamase producer	✓	1	1
12	<i>Escherichia coli</i>	derived from	ATCC® 8739™*	89028		✓	1	1
	<i>Fluoribacter bozeman</i>	derived from	ATCC® 33217™*	89157		✓	2	8
	<i>Fusobacterium nucleatum subsp. nucleatum</i>	derived from	ATCC® 25586™*	89118		✓	2	4
	<i>Gardnerella vaginalis</i>	derived from	ATCC® 14018™*	89099		✓	2	9
	<i>Geobacillus stearothermophilus</i>	derived from	ATCC® 7953™*	89203		✓	1	1
	<i>Haemophilus haemolyticus</i>	derived from	ATCC® 33390™*	89123		✓	2	3
	<i>Haemophilus influenzae</i>	derived from	ATCC® 10211™*	89120	type b; beta lactamase negative	✓	2	3
	<i>Haemophilus influenzae</i>	derived from	ATCC® 19418™*	89160		✓	2	3
	<i>Haemophilus influenzae</i>	derived from	ATCC® 33391™*	89176		✓	2	3
	<i>Haemophilus influenzae</i>	derived from	ATCC® 33533™*	89124	type b; beta lactamase producer	✓	2	3
	<i>Haemophilus influenzae</i>	derived from	ATCC® 49247™*	89077		✓	2	3
	<i>Haemophilus influenzae</i>	derived from	ATCC® 49766™*	89076		✓	2	3
	<i>Haemophilus influenzae</i>	derived from	ATCC® 9007™*	89142	type c	✓	2	3
	<i>Issatchenkia orientalis</i>	derived from	ATCC® 6258™*	89073		✓	1	5
	<i>Klebsiella pneumoniae</i>	derived from	ATCC® BAA-1144™*	89150	control strain for the AmpC disk test; weak positive	✓	2	1
	<i>Klebsiella pneumoniae</i>	derived from	ATCC® BAA-1705™*	89088	Modified Hodge Test (MHT) positive control	✓	2	1
	<i>Klebsiella pneumoniae</i>	derived from	ATCC® BAA-1706™*	89087	Modified Hodge Test (MHT) negative control	✓	2	1
	<i>Klebsiella pneumoniae</i>	derived from	ATCC® BAA-2146™*	89069	New Delhi metallo-beta-lactamase (NDM-1) positive	✓	2	1
97	<i>Klebsiella pneumoniae subsp. pneumoniae</i>	derived from	ATCC® 13883™*	89089		✓	2	1
	<i>Klebsiella pneumoniae subsp. pneumoniae</i>	derived from	ATCC® 31488™*	89199		✓	2	1
192	<i>Klebsiella pneumoniae subsp. pneumoniae</i>	derived from	ATCC® 4352™*	89192		✓	2	1
	<i>Klebsiella pneumoniae subsp. pneumoniae</i>	derived from	ATCC® 700603™*	89070	ESBL positive	✓	2	1
98	<i>Lactobacillus acidophilus</i>	derived from	ATCC® 4356™*	89080		✓	1	11
	<i>Lactobacillus fermentum</i>	derived from	ATCC® 9338™*	89100		✓	1	11
	<i>Lactobacillus leichmannii</i>	derived from	ATCC® 4797™*	89081		✓	1	11
	<i>Lactobacillus paracasei subsp. paracasei</i>	derived from	ATCC® BAA-52™*	89055		✓	1	11
16	<i>Lactococcus lactis subsp. lactis</i>	derived from	ATCC® 19435™*	89082		✓	1	2
180	<i>Legionella pneumophila subsp. fraseri</i>	derived from	ATCC® 33156™*	89151		✓	2	8

WDCM				CultiControl Ref.	notes	IVD according to 98/79/EC	BioSafety Level	Recommended growth method
107	<i>Legionella pneumophila subsp. pneumophila</i>	derived from	ATCC® 33152™*	89052		✓	2	8
	<i>Listeria grayi</i>	derived from	ATCC® 25401™*	89101		✓	1	1
17	<i>Listeria innocua</i>	derived from	ATCC® 33090™*	89029		✓	1	1
18	<i>Listeria ivanoviisubsp.ivanovii</i>	derived from	ATCC® 19119™*	89030		✓	2	1
21	<i>Listeria monocytogenes</i>	derived from	ATCC® 13932™*	89085	serotype 4b	✓	2	1
	<i>Listeria monocytogenes</i>	derived from	ATCC® 15313™*	89188	non-hemolytic on sheep blood	✓	2	1
20	<i>Listeria monocytogenes</i>	derived from	ATCC® 19111™*	89031	serotype 1	✓	2	1
	<i>Listeria monocytogenes</i>	derived from	ATCC® 19115™*	89051	serotype 4b	✓	2	1
109	<i>Listeria monocytogenes</i>	derived from	ATCC® 35152™*	89148		✓	2	1
	<i>Listeria monocytogenes</i>	derived from	ATCC® 7644™*	89060		✓	2	1
	<i>Listeria monocytogenes</i>	derived from	ATCC® BAA-751™*	89143		✓	2	1
	<i>Micrococcus luteus</i>	derived from	ATCC® 10240™*	89096		✓	1	1
111	<i>Micrococcus luteus</i>	derived from	ATCC® 4698™*	89102		✓	1	1
	<i>Moraxella (Branhamella) catarrhalis</i>	derived from	ATCC® 25238™*	89103		✓	1	2
	<i>Neisseria gonorrhoeae</i>	derived from	ATCC® 19424™*	89074		✓	2	3
	<i>Neisseria gonorrhoeae</i>	derived from	ATCC® 31426™*	89075	beta lactamase producer	✓	2	3
	<i>Neisseria gonorrhoeae</i>	derived from	ATCC® 49226™*	89104		✓	2	3
	<i>Neisseria gonorrhoeae</i>	derived from	ATCC® 49981™*	89122	Penicillin resistant	✓	2	3
	<i>Neisseria meningitidis</i>	derived from	ATCC® 13090™*	89164	serogroup B	✓	2	3
	<i>Nocardia brasiliensis</i>	derived from	ATCC® 19296™*	89189		✓	2	1
	<i>Peptostreptococcus anaerobius</i>	derived from	ATCC® 27337™*	89165		✓	1	4
	<i>Plesiomonas shigelloides</i>	derived from	ATCC® 14029™*	89094		✓	2	1
	<i>Porphyromonas gingivalis</i>	derived from	ATCC® 33277™*	89162		✓	2	4
	<i>Prevotella melaninogenica</i>	derived from	ATCC® 25845™*	89134		✓	2	4
	<i>Propionibacterium acnes</i>	derived from	ATCC® 11827™*	89135		✓	1	4
	<i>Proteus hauseri</i>	derived from	ATCC® 13315™*	89190		✓	2	1
	<i>Proteus mirabilis</i>	derived from	ATCC® 12453™*	89049		✓	2	1
	<i>Proteus mirabilis</i>	derived from	ATCC® 25933™*	89032		✓	2	1
23	<i>Proteus mirabilis</i>	derived from	ATCC® 29906™*	89083		✓	2	1
	<i>Proteus mirabilis</i>	derived from	ATCC® 35659™*	89105		✓	2	1
	<i>Proteus mirabilis</i>	derived from	ATCC® 43071™*	89106		✓	2	1
	<i>Proteus vulgaris</i>	derived from	ATCC® 6380™*	89107		✓	2	1
	<i>Providencia stuartii</i>	derived from	ATCC® 33672™*	89125		✓	1	1
24	<i>Pseudomonas aeruginosa</i>	derived from	ATCC® 10145™*	89108		✓	2	1
	<i>Pseudomonas aeruginosa</i>	derived from	ATCC® 15442™*	89109	Pyocyanin not produced	✓	2	1
25	<i>Pseudomonas aeruginosa</i>	derived from	ATCC® 27853™*	89033		✓	2	1
26	<i>Pseudomonas aeruginosa</i>	derived from	ATCC® 9027™*	89034		✓	2	1
115	<i>Pseudomonas fluorescens</i>	derived from	ATCC® 13525™*	89110		✓	1	1
28	<i>Rhodococcus equi</i>	derived from	ATCC® 6939™*	89035	recommended for CAMP test for <i>Listeria monocytogenes</i>	✓	2	2
58	<i>Saccharomyces cerevisiae</i>	derived from	ATCC® 9763™*	89036		✓	1	5
	<i>Salmonella enterica subsp. arizonae</i>	derived from	ATCC® 13314™*	89154		✓	2	1
30	<i>Salmonella enterica subsp. enterica serovar Enteritidis</i>	derived from	ATCC® 13076™*	89084	group D	✓	2	1
	<i>Salmonella enterica subsp. enterica serovar Hillingdon</i>	derived from	ATCC® 9184™*	89185		✓	2	1



WDCM				CultiControl Ref.	notes	IVD according to 98/79/EC	BioSafety Level	Recommended growth method
	<i>Salmonella enterica subsp. enterica serovar Paratyphi</i>	derived from	ATCC® 9150™*	89161	group A; H2S negative	✓	2	1
121	<i>Salmonella enterica subsp. enterica serovar Typhimurium</i>	derived from	ATCC® 13311™*	89054		✓	2	1
31	<i>Salmonella enterica subsp. enterica serovar Typhimurium</i>	derived from	ATCC® 14028™*	89037		✓	2	1
	<i>Salmonella enterica subsp. enterica serovar Typhimurium</i>	derived from	ATCC® 49416™*	89197	highly mutable; recommended for Ames test	✓	2	1
	<i>Serratia marcescens</i>	derived from	ATCC® 14756™*	89191	pigmented	✓	1	1
	<i>Serratia marcescens</i>	derived from	ATCC® 8100™*	89121		✓	1	1
	<i>Shigella boydii</i>	derived from	ATCC® 9207™*	89179	serotype 1	✓	2	1
126	<i>Shigella flexneri</i>	derived from	ATCC® 12022™*	89038	serotype 2b	✓	2	1
	<i>Shigella flexneri</i>	derived from	ATCC® 9199™*	89198	serotype 1a	✓	2	1
	<i>Shigella sonnei</i>	derived from	ATCC® 25931™*	89058		✓	2	1
	<i>Shigella sonnei</i>	derived from	ATCC® 9290™*	89180		✓	2	1
	<i>Staphylococcus aureus</i>	derived from	ATCC® 33862™*	89042	recommended for CAMP test	✓	2	1
193	<i>Staphylococcus aureus</i>	derived from	ATCC® 6538™*	89044		✓	2	1
	<i>Staphylococcus aureus subsp. aureus</i>	derived from	ATCC® 19095™*	89137		✓	2	1
34	<i>Staphylococcus aureus subsp. aureus</i>	derived from	ATCC® 25923™*	89040		✓	2	1
131	<i>Staphylococcus aureus subsp. aureus</i>	derived from	ATCC® 29213™*	89041		✓	2	1
	<i>Staphylococcus aureus subsp. aureus</i>	derived from	ATCC® 33591™*	89116	methicillin resistant	✓	2	1
211	<i>Staphylococcus aureus subsp. aureus</i>	derived from	ATCC® 43300™*	89043	methicillin resistant; mec A positive	✓	2	1
	<i>Staphylococcus aureus subsp. aureus</i>	derived from	ATCC® 49476™*	89181		✓	2	1
	<i>Staphylococcus aureus subsp. aureus</i>	derived from	ATCC® 700698™*	89092	Methicillin resistant; GRD MIC Test Strip control	✓	2	1
	<i>Staphylococcus aureus subsp. aureus</i>	derived from	ATCC® 700699™*	89093	Methicillin resistant; Mu50; reduced Vancomycin susceptibility	✓	2	1
35	<i>Staphylococcus aureus subsp. aureus</i>	derived from	ATCC® 9144™*	89182		✓	2	1
	<i>Staphylococcus aureus subsp. aureus</i>	derived from	ATCC® BAA-44™*	89170	Methicillin resistant	✓	2	1
36	<i>Staphylococcus epidermidis</i>	derived from	ATCC® 12228™*	89045		✓	1	1
132	<i>Staphylococcus epidermidis</i>	derived from	ATCC® 14990™*	89202		✓	1	1
	<i>Staphylococcus haemolyticus</i>	derived from	ATCC® 29970™*	89126		✓	2	1
159	<i>Staphylococcus saprophyticus</i>	derived from	ATCC® 15305™*	89153		✓	1	1
	<i>Staphylococcus xylosus</i>	derived from	ATCC® 29971™*	89133		✓	2	1
	<i>Stenotrophomonas maltophilia</i>	derived from	ATCC® 13637™*	89149		✓	1	1
	<i>Stenotrophomonas maltophilia</i>	derived from	ATCC® 17666™*	89194		✓	1	1
	<i>Streptococcus agalactiae</i>	derived from	ATCC® 13813™*	89046	group B; non-hemolytic in absence of CAMP Factor	✓	2	2
	<i>Streptococcus anginosus</i>	derived from	ATCC® 33397™*	89127	group G; type 1	✓	2	2
133	<i>Streptococcus bovis</i>	derived from	ATCC® 33317™*	89061		✓	1	2
	<i>Streptococcus dysgalactiae subsp. equisimilis</i>	derived from	ATCC® 12388™*	89128	group C	✓	2	2
	<i>Streptococcus mitis</i>	derived from	ATCC® 6249™*	89129		✓	2	2
	<i>Streptococcus mutans</i>	derived from	ATCC® 25175™*	89062		✓	1	2
	<i>Streptococcus pneumoniae</i>	derived from	ATCC® 27336™*	89063		✓	2	2
	<i>Streptococcus pneumoniae</i>	derived from	ATCC® 49619™*	89047	low level penicillin resistance by oxacillin test	✓	2	2
	<i>Streptococcus pneumoniae</i>	derived from	ATCC® 700671™*	89175		✓	2	2



WDCM				CultiControl Ref.	notes	IVD according to 98/79/EC	BioSafety Level	Recommended growth method
	<i>Streptococcus pyogenes</i>	derived from	ATCC® 19615™*	89048	group A	✓	2	2
	<i>Streptococcus pyogenes</i>	derived from	ATCC® 49399™*	89130	group A	✓	2	2
	<i>Streptococcus salivarius</i>	derived from	ATCC® 13419™*	89131		✓	1	2
134	<i>Streptococcus salivarius subsp. thermophilus</i>	derived from	ATCC® 19258™*	89186		✓	1	2
	<i>Streptococcus sanguinis</i>	derived from	ATCC® 10556™*	89064		✓	2	2
	<i>Trichophyton mentagrophytes</i>	derived from	ATCC® 9533™*	89140		✓	2	5
	<i>Vibrio alginolyticus</i>	derived from	ATCC® 17749™*	89144		✓	1	10
37	<i>Vibrio parahaemolyticus</i>	derived from	ATCC® 17802™*	89056		✓	2	10
160	<i>Yersinia enterocolitica subsp. enterocolitica</i>	derived from	ATCC® 23715™*	89168	biotype 1; serotype 8	✓	2	1
38	<i>Yersinia enterocolitica subsp. enterocolitica</i>	derived from	ATCC® 9610™*	89050	biovar 1; serogroup O:8	✓	2	1



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