

IMMUNOASSAY PREMIUM - LEVEL I (IA PREMIUM I)

CAT. NO. IA2638
CAT. NO. IA2633
LOT NO. 2090EC

GTIN: 05055273203844
GTIN: 05055273203837
EXPIRY: 2022-11-28

SIZE: 12 x 5 ml
SIZE: 4 x 5 ml

INTENDED USE

This product is intended for *in vitro* diagnostic use, as assayed quality control material to monitor the accuracy and reproducibility of analytes listed in the package insert.

This device is for prescription use only.

SAFETY PRECAUTIONS AND WARNINGS

For *in vitro* diagnostic use only. Do not pipette by mouth. Exercise the normal precautions required for handling laboratory reagents.

Human source material, from which this product has been derived, has been tested at donor level for the Human Immunodeficiency Virus (HIV 1, HIV 2) antibody, Hepatitis B Surface Antigen (HbsAg), and Hepatitis C Virus (HCV) antibody and found to be NON-REACTIVE. FDA approved methods have been used to conduct these tests.

However, since no method can offer complete assurance as to the absence of infectious agents, this material and all patient samples should be handled as though capable of transmitting infectious diseases and disposed of accordingly.

The Abbott Architect CA19-9 assay utilises an antibody/antigen system based on the 1116-NA-19-9 antibody. There are reports that the formulation employed with this system may return elevated concentrations, when compared to other methods for samples expressing high levels of 1116-NA-19-9 reactive determinants.

Health and Safety Data Sheets are available on request.

STORAGE AND STABILITY

OPENED: Store refrigerated (+2°C to +8°C). Reconstituted serum is stable for 7 days at +2°C to +8°C, if kept capped in original container and free from contamination, or 4 weeks frozen once at -20°C. C-Peptide is stable for 1 day at +2°C to +8°C.

Thyroglobulin should be tested within 4 hours of reconstitution when stored at +2°C to +8°C, or within 2 weeks when stored at -20°C. ACTH should be tested immediately after the 30-minute reconstitution period. No frozen stability claim is made for ACTH, Aldosterone and C-Peptide. Only the required amount of product should be removed. After use, any residual product should NOT BE RETURNED to the original vial.

UNOPENED: Store refrigerated (+2°C to +8°C). Stable to expiration date printed on individual vials.

Bacterial contamination of the reconstituted serum will cause reductions in the stability of many components. If bacterial contamination is suspected, the vial should be discarded and a fresh vial reconstituted.

PREPARATION

Immunoassay Premium is supplied lyophilised.

1. Carefully reconstitute each vial of lyophilised serum with exactly 5 ml of distilled water at +15°C to +25°C. Close the bottle and allow to stand for 30 minutes before use. Ensure contents are completely dissolved by swirling gently. Avoid formation of foam. Do not shake.
2. Refer to the Control section of the individual analyser application.
3. Refrigerate any unused material. Prior to reuse, mix contents thoroughly.

MATERIALS PROVIDED

Immunoassay Premium - Level I: 12 x 5 ml Tri-Level: 4 x 5 ml

MATERIAL REQUIRED BUT NOT PROVIDED

Volumetric pipette

VALUE ASSIGNMENT

Each batch of Immunoassay Premium is submitted to a number of external laboratories. Values are assigned from a consensus of results obtained by these laboratories, using a unique statistical analysis. Average values should normally fall within the listed ranges for analytes in the instruments specified in this product insert. However, variations may be caused by instrument reagents and laboratory technique. Therefore, the range produced herein should only be considered as a reference and it is recommended that each laboratory establish its own mean and acceptable ranges. Aldosterone is present in control levels 2 and level 3 only. Parathyroid Hormone (PTH) is present in the control, but no claim is made for the expected value or stability of this analyte.

If a method is unavailable, contact Randox Laboratories - Technical Services, Northern Ireland, tel: +44 (0) 28 9445 1070 or email Technical.Services@randox.com.



Randox Teoranta, Meenmore,
Dungloe, Donegal,
F94 TV06, Ireland

27 Apr '21 ne

IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 2090EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
17-OH-Progesterone	nmol/l	2.34	1.76	2.93	Immunotech RIA
	ng/ml	0.775	0.583	0.967	
	nmol/l	2.97	2.23	3.71	DRG ELISA
	ng/ml	0.983	0.738	1.23	
	nmol/l	3.45	2.59	4.31	SNIBE Maglumi Analysers
	ng/ml	1.14	0.857	1.42	
25-OH Vitamin D	nmol/l	38.3	28.7	47.9	Diasorin Liaison
	nmol/l	27.8	20.9	34.8	Siemens Centaur XP/XPT/Classic
	nmol/l	18.1	13.6	22.6	Roche Vitamin D Total
	nmol/l	20.8	15.6	26.0	ELISA
	nmol/l	22.2	16.7	27.8	Abbott Architect
	nmol/l	20.8	15.6	26.0	IDS iSYS
	nmol/l	35.9	26.9	44.9	SNIBE Maglumi Analysers
	nmol/l	96.4	72.3	121	Vitros ECI
	nmol/l	22.8	17.1	28.5	Tosoh Series
	nmol/l	22.5	16.9	28.1	BioMerieux Vidas
	nmol/l	39.8	29.9	49.8	Beckman Dxl 600/800
	nmol/l	43.7	32.8	54.7	Beckman Access 25 OH Vitamin D Total
	nmol/l	20.3	15.2	25.4	Roche Vitamin D Total II
	nmol/l	42.2	31.7	52.8	Diasorin Liaison XL
ACTH	pmol/l	1.12	0.840	1.40	Siemens Immulite 2000/2500
	pg/ml	5.09	3.82	6.36	
	pmol/l	2.20	1.65	2.75	Siemens Immulite 1000
	pg/ml	10.0	7.50	12.5	
Aldosterone	pmol/l	13.9	10.4	17.4	SNIBE Maglumi Analysers
	pg/ml	5.02	3.75	6.29	
	pmol/l	371	278	464	IDS iSYS
	pg/ml	134	100	168	
	pmol/l	101	75.8	126	Diasorin Liaison XL
Alpha-fetoprotein	pg/ml	36.4	27.3	45.5	
	KIU/l = IU/ml	9.79	7.83	11.7	Abbott Architect
	ng/ml	11.8	9.47	14.1	
	KIU/l = IU/ml	10.9	8.72	13.1	BioMerieux Vidas
	ng/ml	13.2	10.6	15.8	
	KIU/l = IU/ml	11.4	9.01	13.8	Siemens Centaur XP/XPT/Classic
	ng/ml	13.8	10.9	16.7	
	KIU/l = IU/ml	9.92	7.94	11.9	Siemens Immulite 2000/2500
	ng/ml	12.0	9.61	14.4	
	KIU/l = IU/ml	10.7	8.56	12.8	Siemens Immulite 1000
	ng/ml	12.9	10.4	15.4	
	KIU/l = IU/ml	9.84	7.87	11.8	Beckman Dxl800
	ng/ml	11.9	9.52	14.3	

IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 2090EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Alpha-fetoprotein	KIU/l = IU/ml	10.7	8.56	12.8	Roche Elecsys
	ng/ml	12.9	10.4	15.4	
	KIU/l = IU/ml	11.9	9.52	14.3	Diasorin Liaison
	ng/ml	14.4	11.5	17.3	
	KIU/l = IU/ml	9.89	7.91	11.9	Beckman Access
	ng/ml	12.0	9.57	14.4	
	KIU/l = IU/ml	10.4	8.32	12.5	Tosoh Series
	ng/ml	12.6	10.1	15.1	
	KIU/l = IU/ml	10.7	8.56	12.8	Vitros ECI
	ng/ml	11.1	8.88	13.3	
	KIU/l = IU/ml	11.0	8.80	13.2	Roche Cobas 6000/8000
	ng/ml	13.3	10.6	16.0	
	KIU/l = IU/ml	17.9	14.3	21.5	CIS IRMA
	ng/ml	21.7	17.3	26.1	
	KIU/l = IU/ml	10.9	8.72	13.1	Roche Cobas E411
	ng/ml	13.2	10.6	15.8	
Amikacin	KIU/l = IU/ml	10.4	8.32	12.5	SNIBE Maglumi Analysers
	ng/ml	12.6	10.1	15.1	
	KIU/l = IU/ml	10.7	8.45	13.0	Siemens Centaur CP
	ng/ml	12.9	10.2	15.6	
	KIU/l = IU/ml	11.1	8.85	13.3	Siemens Atellica IM
	ng/ml	13.4	10.7	16.1	
	KIU/l = IU/ml	11.8	9.44	14.2	Diasorin Liaison XL
	ng/ml	14.3	11.4	17.2	
Androstenedione	µmol/l	6.66	5.33	7.99	Roche Integra
	µg/ml	3.90	3.12	4.68	
	µmol/l	6.39	5.11	7.67	Roche Cobas 6000/8000
	µg/ml	3.74	2.99	4.49	
Beta-2-microglobulin	µmol/l	6.40	5.12	7.68	Gravimetric
	µg/ml	3.75	3.00	4.50	
	nmol/l	4.85	3.64	6.06	Siemens Immulite 2000
	ng/ml	1.39	1.04	1.74	
C-Peptide	nmol/l	2.38	1.79	2.98	DiaMetra ELISA
	ng/ml	0.683	0.514	0.852	
	nmol/l	5.03	3.77	6.29	Diasorin Liaison XL
	ng/ml	1.44	1.08	1.81	
Beta-2-microglobulin	µg/ml = mg/l	1.03	0.824	1.24	Abbott Architect
	µg/ml = mg/l	1.03	0.824	1.24	BioMerieux Vidas
	µg/ml = mg/l	1.01	0.808	1.21	Behring Nephelometer
	µg/ml = mg/l	1.03	0.824	1.24	Siemens Immulite 2000/2500
	µg/ml = mg/l	1.25	1.00	1.50	Siemens Immulite 1000
	µg/ml = mg/l	0.900	0.720	1.08	Tosoh Series
	µg/ml = mg/l	1.15	0.920	1.38	Roche Cobas 6000/8000
C-Peptide	nmol/l	0.210	0.158	0.263	Siemens Immulite 2000/2500
	ng/ml	0.634	0.477	0.791	
	nmol/l	0.360	0.270	0.450	Roche Cobas 6000/8000
	ng/ml	1.09	0.815	1.37	

IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 2090EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
C-Peptide	nmol/l	0.120	0.090	0.150	Diasorin Liaison
	ng/ml	0.362	0.272	0.452	
	nmol/l	0.330	0.248	0.413	Roche Cobas E411
	ng/ml	0.996	0.749	1.24	
	nmol/l	0.280	0.210	0.350	Abbott Architect
	ng/ml	0.845	0.634	1.06	
	nmol/l	0.199	0.139	0.259	Siemens Centaur XP/XPT/Classic
	ng/ml	0.601	0.421	0.781	
Carbamazepine	nmol/l	0.230	0.173	0.288	Tosoh Series
	ng/ml	0.694	0.522	0.866	
	nmol/l	0.440	0.330	0.550	SNIBE Maglumi Analysers
	ng/ml	1.33	0.996	1.66	
	µmol/l	15.8	12.6	19.0	Abbott Architect
	µg/ml	3.74	2.98	4.50	
	µmol/l	18.7	13.5	23.9	Siemens Centaur XP/XPT/Classic
	µg/ml	4.42	3.18	5.66	
	µmol/l	14.3	11.4	17.2	Siemens Dimension
	µg/ml	3.38	2.69	4.07	
	µmol/l	12.9	10.3	15.5	Siemens Immulite 2000/2500
	µg/ml	3.05	2.43	3.67	
	µmol/l	13.9	11.1	16.7	Siemens Immulite 1000
	µg/ml	3.29	2.62	3.96	
	µmol/l	15.3	12.2	18.4	Roche Integra
	µg/ml	3.62	2.88	4.36	
	µmol/l	13.8	11.0	16.6	Roche Cobas E411
	µg/ml	3.26	2.60	3.92	
	µmol/l	14.2	11.4	17.0	Roche Cobas 6000/8000
	µg/ml	3.36	2.69	4.03	
Carcinoembryonic Antigen (CEA)	µmol/l	14.2	11.4	17.0	Beckman DxC
	µg/ml	3.36	2.69	4.03	
	µmol/l	16.7	13.4	20.0	Beckman AU400/600/640/2700/5400
	µg/ml	3.95	3.17	4.73	
	µmol/l	15.8	12.6	19.0	Siemens ADVIA 1200/1650/1800/2400
	µg/ml	3.74	2.98	4.50	
Cortisol	µmol/l	15.4	12.3	18.4	Gravimetric
	µg/ml	3.63	2.91	4.35	
	ng/ml = µg/l	2.40	1.92	2.88	Siemens Immulite 2000/2500
	ng/ml = µg/l	2.54	2.03	3.05	Roche Cobas 6000/8000
	ng/ml = µg/l	2.52	2.02	3.02	Roche Cobas E411
	nmol/l	225	169	281	Abbott Architect
	µg/dl	8.10	6.08	10.1	
	nmol/l	131	98.3	164	BioMerieux Vidas
	µg/dl	4.72	3.54	5.90	
	nmol/l	206	136	276	Siemens Centaur XP/XPT/Classic
	µg/dl	7.42	4.90	9.94	

IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 2090EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Cortisol	nmol/l	199	149	249	CIS RIA
	µg/dl	7.16	5.36	8.96	
	nmol/l	204	153	255	Siemens Immulite 2000/2500
	µg/dl	7.34	5.51	9.17	
	nmol/l	204	153	255	Siemens Immulite 1000
	µg/dl	7.34	5.51	9.17	
	nmol/l	210	158	263	Beckman Dxl800
	µg/dl	7.56	5.69	9.43	
	nmol/l	197	148	246	Roche Elecsys
	µg/dl	7.09	5.33	8.85	
	nmol/l	257	193	321	Diasorin Liaison
	µg/dl	9.25	6.95	11.6	
	nmol/l	193	145	241	Roche Modular E170
	µg/dl	6.95	5.22	8.68	
	nmol/l	214	161	268	Beckman Access
	µg/dl	7.70	5.80	9.60	
	nmol/l	195	146	244	Tosoh Series
	µg/dl	7.02	5.26	8.78	
	nmol/l	153	115	191	Vitros Eci
	µg/dl	5.51	4.14	6.88	
	nmol/l	195	146	244	Roche Cobas 6000/8000
	µg/dl	7.02	5.26	8.78	
	nmol/l	208	156	260	Roche Cobas E411
	µg/dl	7.49	5.62	9.36	
	nmol/l	295	221	369	SNIBE Maglumi Analysers
	µg/dl	10.6	7.96	13.2	
	nmol/l	247	163	331	Siemens Centaur CP
	µg/dl	8.89	5.87	11.9	
	nmol/l	211	158	264	Roche Cobas 4000/e411 Gen II
	µg/dl	7.60	5.69	9.51	
	nmol/l	190	143	238	Roche Cobas 6000/8000 Gen II
	µg/dl	6.84	5.15	8.53	
	nmol/l	204	153	255	Roche Elecsys Gen II
	µg/dl	7.34	5.51	9.17	
	nmol/l	221	165	276	Siemens Atellica IM
	µg/dl	7.94	5.94	9.94	
DHEA-S	µmol/l	2.24	1.79	2.69	Abbott Architect
	µmol/l	1.71	1.37	2.05	Siemens Immulite 2000/2500
	µmol/l	1.72	1.38	2.06	Siemens Immulite 1000
	µmol/l	2.03	1.62	2.44	Beckman Dxl800
	µmol/l	3.02	2.42	3.62	Roche Elecsys
	µmol/l	2.11	1.69	2.53	Beckman Access
	µmol/l	2.03	1.32	2.74	Siemens Centaur XP/XPT/Classic
	µmol/l	2.82	2.26	3.38	Roche Cobas E411
	µmol/l	2.72	2.18	3.26	Roche Cobas 6000/8000
	µmol/l	1.99	1.59	2.39	SNIBE Maglumi Analysers

IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 2090EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Digoxin	nmol/l	0.640	0.512	0.768	Abbott Architect
	ng/ml	0.500	0.400	0.600	
	nmol/l	0.670	0.536	0.804	BioMerieux Vidas
	ng/ml	0.523	0.419	0.627	
	nmol/l	1.04	0.780	1.30	Siemens Centaur XP/XPT/Classic
	ng/ml	0.810	0.609	1.02	
	nmol/l	0.790	0.632	0.948	Siemens Dimension
	ng/ml	0.617	0.494	0.740	
	nmol/l	0.690	0.552	0.828	Siemens Immulite 2000/2500
	ng/ml	0.539	0.431	0.647	
	nmol/l	0.860	0.688	1.03	Beckman Dxl800
	ng/ml	0.672	0.537	0.807	
	nmol/l	1.00	0.800	1.20	Roche Elecsys
	ng/ml	0.781	0.625	0.937	
	nmol/l	0.850	0.680	1.02	Roche Integra
	ng/ml	0.664	0.531	0.797	
	nmol/l	0.910	0.728	1.09	Roche Cobas 6000/8000
	ng/ml	0.711	0.569	0.853	
	nmol/l	0.990	0.792	1.19	Beckman AU400/600/640/2700/5400
	ng/ml	0.773	0.619	0.927	
Ethosuximide	nmol/l	1.02	0.816	1.22	Roche Cobas 4000/E411
	ng/ml	0.797	0.637	0.957	
	nmol/l	0.896	0.720	1.08	Gravimetric
	ng/ml	0.700	0.560	0.840	
Ferritin	μmol/l	226	181	271	Gravimetric
	μg/ml	32.0	25.7	38.4	
	ng/ml = μg/l	16.1	12.9	19.3	Abbott Architect
	ng/ml = μg/l	13.7	11.0	16.4	BioMerieux Vidas
	ng/ml = μg/l	13.3	10.6	16.0	Roche Tinaquant
	ng/ml = μg/l	13.6	10.2	17.0	Siemens Centaur XP/XPT/Classic
	ng/ml = μg/l	14.7	11.8	17.6	Siemens Dimension
	ng/ml = μg/l	13.6	10.9	16.3	Siemens Immulite 2000/2500
	ng/ml = μg/l	14.5	11.6	17.4	Siemens Immulite 1000
	ng/ml = μg/l	10.7	8.56	12.8	Beckman Dxl800
	ng/ml = μg/l	16.2	13.0	19.4	Roche Elecsys
	ng/ml = μg/l	15.2	12.2	18.2	Diasorin Liaison
	ng/ml = μg/l	15.8	12.6	19.0	Roche Modular E170
	ng/ml = μg/l	10.6	8.48	12.7	Beckman Access
	ng/ml = μg/l	10.5	8.40	12.6	Tosoh Series
	ng/ml = μg/l	11.8	9.44	14.2	Vitros ECI
	ng/ml = μg/l	12.4	9.92	14.9	Immunotech IRMA
	ng/ml = μg/l	16.8	13.4	20.2	Roche Cobas E411
	ng/ml = μg/l	14.7	11.8	17.6	Beckman AU400/600/640/2700/5400
	ng/ml = μg/l	12.4	9.30	15.5	Siemens Centaur CP
	ng/ml = μg/l	12.3	9.86	14.8	Siemens Atellica IM
	ng/ml = μg/l	14.7	11.8	17.6	Diasorin Liaison XL

IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 2090EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Folate	nmol/l	4.13	3.14	5.12	Abbott Architect
	ng/ml	1.82	1.38	2.26	
	nmol/l	8.97	4.93	13.0	Siemens Centaur XP/XPT/Classic (enhanced kit)
	ng/ml	3.96	2.18	5.74	
	nmol/l	3.08	2.34	3.82	Siemens Immulite 2000
	ng/ml	1.36	1.03	1.69	
	nmol/l	3.71	2.82	4.60	Beckman Dxl800
	ng/ml	1.64	1.24	2.04	
	nmol/l	4.14	3.15	5.13	Beckman Access
	ng/ml	1.83	1.39	2.27	
	nmol/l	3.57	2.71	4.43	Vitros Eci
	ng/ml	1.57	1.20	1.94	
	nmol/l	3.20	2.43	3.97	Roche Cobas E411
	ng/ml	1.41	1.07	1.75	
	nmol/l	3.26	2.48	4.04	Roche Cobas 6000/8000
	ng/ml	1.44	1.09	1.79	
Free T3	nmol/l	3.38	2.57	4.19	Roche Cobas 6000/8000 Folate III
	ng/ml	1.49	1.13	1.85	
	nmol/l	2.97	2.26	3.68	Roche Cobas 4000/e411 Folate III
	ng/ml	1.31	0.997	1.62	
	pmol/l	2.92	2.19	3.65	Abbott Architect
	ng/dl	0.190	0.142	0.238	
	pg/ml	1.90	1.43	2.37	
	pmol/l	2.66	2.00	3.33	BioMerieux Vidas
	ng/dl	0.173	0.130	0.216	
	pg/ml	1.73	1.30	2.16	
	pmol/l	3.60	2.16	5.04	Siemens Centaur XP/XPT/Classic
	ng/dl	0.234	0.140	0.328	
	pg/ml	2.34	1.40	3.28	
	pmol/l	2.91	2.18	3.64	Siemens Immulite 2000/2500
	ng/dl	0.189	0.142	0.236	
	pg/ml	1.89	1.42	2.36	
	pmol/l	2.86	2.15	3.58	Siemens Immulite 1000
	ng/dl	0.186	0.140	0.232	
	pg/ml	1.86	1.40	2.32	
	pmol/l	3.58	2.69	4.48	Beckman Dxl800
	ng/dl	0.233	0.175	0.291	
	pg/ml	2.33	1.75	2.91	
	pmol/l	4.14	3.11	5.18	Roche Elecsys
	ng/dl	0.269	0.202	0.336	
	pg/ml	2.70	2.02	3.38	
	pmol/l	2.88	2.16	3.60	Diasorin Liaison
	ng/dl	0.187	0.140	0.234	
	pg/ml	1.87	1.41	2.33	
	pmol/l	4.01	3.01	5.01	Roche Modular E170
	ng/dl	0.261	0.196	0.326	
	pg/ml	2.61	1.96	3.26	

IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 2090EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Free T3	pmol/l	3.46	2.60	4.33	Beckman Access
	ng/dl	0.225	0.169	0.281	
	pg/ml	2.25	1.69	2.81	
	pmol/l	6.40	4.80	8.00	Vitros ECI
	ng/dl	0.416	0.312	0.520	
	pg/ml	4.17	3.12	5.22	
	pmol/l	4.22	3.17	5.28	Roche Cobas E411
	ng/dl	0.274	0.206	0.342	
	pg/ml	2.75	2.06	3.44	
	pmol/l	3.92	2.94	4.90	Roche Cobas 6000/8000
	ng/dl	0.255	0.191	0.319	
	pg/ml	2.55	1.91	3.19	
	pmol/l	2.31	1.73	2.89	SNIBE Maglumi Analysers
	ng/dl	0.150	0.112	0.188	
	pg/ml	1.50	1.13	1.87	
	pmol/l	3.79	2.27	5.31	Siemens Centaur CP
	ng/dl	0.246	0.148	0.344	
	pg/ml	2.46	1.48	3.44	
	pmol/l	3.35	2.51	4.19	Mindray CL-2000i
	ng/dl	0.218	0.163	0.273	
	pg/ml	2.18	1.63	2.73	
	pmol/l	3.90	2.93	4.88	Siemens Atellica IM
	ng/dl	0.250	0.190	0.320	
	pg/ml	2.54	1.91	3.18	
	pmol/l	2.83	2.12	3.54	Diasorin Liaison XL
	ng/dl	0.180	0.140	0.230	
	pg/ml	1.84	1.38	2.30	
Free T4	pmol/l	9.55	7.16	11.9	Abbott AXSYM
	ng/dl	0.745	0.558	0.932	
	pg/ml	7.45	5.58	9.32	
	pmol/l	9.22	6.92	11.5	Abbott Architect
	ng/dl	0.719	0.540	0.898	
	pg/ml	7.19	5.40	8.98	
	pmol/l	8.20	6.15	10.3	Siemens Centaur XP/XPT/Classic
	ng/dl	0.640	0.480	0.800	
	pg/ml	6.40	4.80	8.00	
	pmol/l	10.3	7.73	12.9	CIS RIA Coated tube
	ng/dl	0.803	0.603	1.00	
	pg/ml	8.03	6.03	10.0	
	pmol/l	12.5	9.38	15.6	Siemens Immulite 2000/2500
	ng/dl	0.975	0.732	1.22	
	pg/ml	9.75	7.32	12.2	
	pmol/l	12.3	9.23	15.4	Siemens Immulite 1000
	ng/dl	0.959	0.720	1.20	
	pg/ml	9.59	7.20	12.0	

IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 2090EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Free T4	pmol/l	9.47	7.10	11.8	Beckman DxI800
	ng/dl	0.739	0.554	0.924	
	pg/ml	7.39	5.54	9.24	
	pmol/l	12.9	9.68	16.1	Roche Elecsys
	ng/dl	1.01	0.755	1.27	
	pg/ml	10.1	7.55	12.7	
	pmol/l	10.8	8.10	13.5	Diasorin Liaison
	ng/dl	0.842	0.632	1.05	
	pg/ml	8.42	6.32	10.5	
	pmol/l	9.41	7.06	11.8	Beckman Access
	ng/dl	0.734	0.551	0.917	
	pg/ml	7.34	5.51	9.17	
	pmol/l	9.68	7.26	12.1	Tosoh Series
	ng/dl	0.755	0.566	0.944	
	pg/ml	7.55	5.66	9.44	
	pmol/l	16.2	12.2	20.3	Vitros ECI
	ng/dl	1.26	0.952	1.57	
	pg/ml	12.6	9.52	15.7	
	pmol/l	12.3	9.23	15.4	Roche Cobas 6000/8000
	ng/dl	0.959	0.720	1.20	
	pg/ml	9.59	7.20	12.0	
	pmol/l	10.8	8.10	13.5	Immunotech IRMA
	ng/dl	0.842	0.632	1.05	
	pg/ml	8.42	6.32	10.5	
	pmol/l	13.2	9.90	16.5	Roche Cobas E411
	ng/dl	1.03	0.772	1.29	
	pg/ml	10.3	7.72	12.9	
	pmol/l	10.3	7.73	12.9	SNIBE Maglumi Analysers
	ng/dl	0.803	0.603	1.00	
	pg/ml	8.03	6.03	10.0	
	pmol/l	9.65	7.24	12.1	Biomerieux Vidas FT4N Kit
	ng/dl	0.753	0.565	0.941	
	pg/ml	7.53	5.65	9.41	
	pmol/l	8.81	6.61	11.0	Siemens Centaur CP
	ng/dl	0.687	0.515	0.859	
	pg/ml	6.87	5.15	8.59	
	pmol/l	8.46	7.19	9.73	Mindray CL-2000i
	ng/dl	0.660	0.560	0.760	
	pg/ml	6.60	5.61	7.59	
	pmol/l	9.78	7.34	12.2	Siemens Atellica IM
	ng/dl	0.760	0.570	0.950	
	pg/ml	7.63	5.73	9.52	
	pmol/l	11.5	8.63	14.4	Diasorin Liaison XL
	ng/dl	0.900	0.670	1.12	
	pg/ml	8.97	6.73	11.2	
FSH	mU/ml	5.27	4.22	6.32	Abbott Architect

IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 2090EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
FSH	mU/ml	6.50	5.20	7.80	BioMerieux Vidas
	mU/ml	7.53	5.27	9.79	Siemens Centaur XP/XPT/Classic
	mU/ml	6.05	4.84	7.26	Siemens Immulite 2000/2500
	mU/ml	6.29	5.03	7.55	Siemens Immulite 1000
	mU/ml	6.46	5.17	7.75	Beckman Dxl800
	mU/ml	5.99	4.79	7.19	Roche/BM Elecsys
	mU/ml	7.64	6.11	9.17	Diasorin Liaison
	mU/ml	5.80	4.64	6.96	Roche Modular E170
	mU/ml	6.20	4.96	7.44	Beckman Access
	mU/ml	6.68	5.34	8.02	Tosoh Series
	mU/ml	4.90	3.92	5.88	Vitros ECI
	mU/ml	6.02	4.82	7.22	Roche Cobas E411
	mU/ml	5.67	4.54	6.80	Roche Cobas 6000/8000
	mU/ml	6.73	5.38	8.08	SNIBE Maglumi Analysers
	mU/ml	5.42	3.79	7.05	Siemens Centaur CP
	mU/ml	6.88	5.50	8.26	Siemens Atellica IM
	mU/ml	8.63	6.90	10.4	Diasorin Liaison XL
Gentamicin	µmol/l	4.64	3.71	5.57	Roche Integra
	µg/ml	2.22	1.77	2.67	
	µmol/l	4.20	3.36	5.04	Siemens Dimension Vista
	µg/ml	2.01	1.61	2.41	
	µmol/l	3.41	2.73	4.09	Roche Cobas 6000/8000
	µg/ml	1.63	1.30	1.96	
	µmol/l	5.17	4.14	6.20	Beckman DxC
	µg/ml	2.47	1.98	2.96	
Growth Hormone (GH)	µmol/l	4.85	3.88	5.82	Gravimetric
	µg/ml	2.32	1.85	2.78	
	µU/ml	3.51	2.81	4.21	CIS IRMA
	ng/ml	1.17	0.936	1.40	
	µU/ml	5.44	4.35	6.53	Siemens Immulite 2000/2500
	ng/ml	1.81	1.45	2.17	
	µU/ml	5.09	4.07	6.11	Siemens Immulite 1000
	ng/ml	1.69	1.36	2.02	
	µU/ml	3.79	3.03	4.55	Beckman Dxl800
	ng/ml	1.26	1.01	1.51	
	µU/ml	3.94	3.15	4.73	Beckman Access
	ng/ml	1.31	1.05	1.57	
	µU/ml	4.31	3.45	5.17	Tosoh Series
	ng/ml	1.44	1.15	1.73	
	µU/ml	4.03	3.22	4.84	Diasorin Liaison
	ng/ml	1.34	1.07	1.61	
	µU/ml	4.89	3.91	5.87	Roche Cobas E411
	ng/ml	1.63	1.30	1.96	
	µU/ml	7.08	5.66	8.50	SNIBE Maglumi Analysers
	ng/ml	2.36	1.88	2.84	
	µU/ml	4.80	3.84	5.76	Roche Cobas 6000/8000
	ng/ml	1.60	1.28	1.92	

IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 2090EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Growth Hormone (GH)	µU/ml	4.59	3.67	5.51	IDS iSYS
	ng/ml	1.53	1.22	1.84	
	µU/ml	3.86	3.09	4.63	Diasorin Liaison XL
	ng/ml	1.29	1.03	1.54	
Immunoglobulin E	KIU/I = IU/ml	278	222	334	Abbott Architect
	KIU/I = IU/ml	175	140	210	Beckman Immage
	KIU/I = IU/ml	207	166	248	BioMerieux Vidas
	KIU/I = IU/ml	235	141	329	Siemens Centaur XP/XPT/Classic
	KIU/I = IU/ml	246	197	295	Siemens Immulite 2000/2500
	KIU/I = IU/ml	266	213	319	Siemens Immulite 1000
	KIU/I = IU/ml	250	200	300	Beckman Dxl800
	KIU/I = IU/ml	249	199	299	Roche Elecsys
	KIU/I = IU/ml	207	166	248	Pharmacia Unicap
	KIU/I = IU/ml	228	182	274	Tosoh Series
	KIU/I = IU/ml	238	190	286	Roche Cobas E411
	KIU/I = IU/ml	235	188	282	Roche Cobas 6000/8000
	KIU/I = IU/ml	205	164	246	SNIBE Maglumi Analysers
	KIU/I = IU/ml	206	124	288	Siemens Centaur CP
Insulin	mU/I	1.82	1.37	2.27	Siemens Centaur XP/XPT/Classic
	µU/ml	1.82	1.37	2.27	
	mU/I	2.08	1.56	2.60	Roche Elecsys
	µU/ml	2.08	1.56	2.60	
	mU/I	1.12	0.840	1.40	Beckman Access
	µU/ml	1.12	0.840	1.40	
	mU/I	1.49	1.12	1.86	Abbott Architect
	µU/ml	1.49	1.12	1.86	
	mU/I	2.30	1.73	2.88	Tosoh Series
	µU/ml	2.30	1.73	2.87	
	mU/I	2.15	1.61	2.69	Roche Cobas E411
	µU/ml	2.15	1.61	2.69	
	mU/I	1.11	0.833	1.39	Beckman Dxl 600/800
	µU/ml	1.11	0.833	1.39	
	mU/I	1.36	1.02	1.70	Diasorin Liaison
	µU/ml	1.36	1.02	1.70	
	mU/I	2.27	1.70	2.84	Roche Cobas 6000/8000
	µU/ml	2.27	1.70	2.84	
Luteinising Hormone (LH)	mU/I	4.06	3.05	5.08	SNIBE Maglumi Analysers
	µU/ml	4.06	3.05	5.07	
	mU/I	1.67	1.25	2.09	Siemens Centaur CP
	µU/ml	1.67	1.25	2.09	
	mU/ml	2.15	1.72	2.58	Abbott Architect
	mU/ml	2.77	2.22	3.32	BioMerieux Vidas
	mU/ml	2.58	1.94	3.22	Siemens Centaur XP/XPT/Classic
	mU/ml	4.93	3.94	5.92	Siemens Immulite 2000
	mU/ml	5.32	4.26	6.38	Siemens Immulite 1000

IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 2090EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Luteinising Hormone (LH)	mU/ml	1.89	1.51	2.27	Beckman Dxl800
	mU/ml	3.66	2.93	4.39	Roche Elecsys
	mU/ml	3.45	2.76	4.14	Diasorin Liaison
	mU/ml	3.66	2.93	4.39	Roche Modular E170
	mU/ml	1.85	1.48	2.22	Beckman Access
	mU/ml	2.42	1.94	2.90	Tosoh Series
	mU/ml	5.00	4.00	6.00	Vitros ECI
	mU/ml	3.53	2.82	4.24	Roche Cobas E411
	mU/ml	3.62	2.90	4.34	Roche Cobas 6000/8000
	mU/ml	3.92	3.14	4.70	SNIBE Maglumi Analysers
	mU/ml	2.53	1.90	3.16	Siemens Centaur CP
	mU/ml	2.36	1.89	2.83	Siemens Atellica IM
	mU/ml	3.65	2.92	4.38	Diasorin Liaison XL
Oestradiol	pmol/l	225	180	270	Abbott Architect
	pg/ml	61.2	49.0	73.4	
	pmol/l	233	186	280	BioMerieux Vidas
	pg/ml	63.4	50.6	76.2	
	pmol/l	174	104	244	Siemens Centaur XP/XPT/Classic
	pg/ml	47.3	28.4	66.2	
	pmol/l	137	110	164	Beckman Dxl800
	pg/ml	37.3	29.9	44.7	
	pmol/l	190	152	228	Roche Elecsys (Estradiol II)
	pg/ml	51.7	41.3	62.1	
	pmol/l	24.6	19.7	29.5	Tosoh (E2)
	pg/ml	6.69	5.36	8.02	
	pmol/l	78.2	62.6	93.8	Vitros ECI
	pg/ml	21.3	17.0	25.6	
	pmol/l	194	155	233	Roche Cobas 6000/8000 (Estradiol II)
	pg/ml	52.8	42.2	63.4	
	pmol/l	184	147	221	Roche Cobas 4000/E411 (Estradiol II)
	pg/ml	50.0	40.0	60.0	
	pmol/l	179	107	251	Siemens Centaur XP/XPT/Classic Enhanced (eE2)
	pg/ml	48.7	29.2	68.2	
	pmol/l	166	133	199	SNIBE Maglumi Analysers
	pg/ml	45.2	36.2	54.2	
	pmol/l	170	102	238	Siemens Centaur CP
	pg/ml	46.2	27.7	64.7	
	pmol/l	194	155	233	Roche Cobas 6000/8000 (Estradiol III)
	pg/ml	52.8	42.2	63.4	
	pmol/l	192	154	230	Roche Elecsys (Estradiol III)
	pg/ml	52.2	41.9	62.5	
	pmol/l	190	152	228	Roche Cobas 4000/E411 (Estradiol III)
	pg/ml	51.7	41.3	62.1	
	pmol/l	201	160	241	Siemens Atellica IM
	pg/ml	54.5	43.5	65.6	
Paracetamol	mmol/l	0.160	0.128	0.192	Abbott Architect
	mg/l	24.2	19.4	29.0	

IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 2090EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Paracetamol	mmol/l	0.150	0.120	0.180	Roche Cobas 6000/8000
	mg/l	22.7	18.2	27.2	
	mmol/l	0.166	0.130	0.200	Gravimetric
	mg/l	25.1	19.7	30.3	
Phenobarbital	µmol/l	35.5	28.4	42.6	Abbott Architect
	µg/ml	8.24	6.59	9.89	
	µmol/l	31.8	25.4	38.2	Roche Cobas 6000/8000
	µg/ml	7.38	5.89	8.87	
	µmol/l	36.9	29.5	44.3	Siemens Immulite 2000/2500
	µg/ml	8.56	6.84	10.3	
	µmol/l	32.8	26.2	39.4	Beckman AU400/600/640/2700/5400
	µg/ml	7.61	6.08	9.14	
	µmol/l	36.7	29.4	44.0	Roche Integra
	µg/ml	8.51	6.82	10.2	
	µmol/l	36.2	29.0	43.4	Siemens Immulite 1000
	µg/ml	8.40	6.73	10.1	
	µmol/l	35.6	28.5	42.7	Beckman DxC
	µg/ml	8.26	6.61	9.91	
	µmol/l	34.5	27.6	41.4	Gravimetric
	µg/ml	8.00	6.40	9.60	
Phenytoin	µmol/l	19.9	15.9	23.9	Abbott Architect
	µg/ml	5.02	4.01	6.03	
	µmol/l	19.3	14.5	24.1	Siemens Centaur XP/XPT/Classic
	µg/ml	4.87	3.65	6.09	
	µmol/l	18.1	14.5	21.7	Siemens Dimension
	µg/ml	4.57	3.66	5.48	
	µmol/l	19.0	15.2	22.8	Siemens Immulite 2000/2500
	µg/ml	4.80	3.84	5.76	
	µmol/l	21.2	17.0	25.4	Siemens Immulite 1000
	µg/ml	5.35	4.29	6.41	
	µmol/l	19.8	15.8	23.8	Roche Integra
	µg/ml	5.00	3.99	6.01	
	µmol/l	19.2	15.4	23.0	Roche Cobas 6000/8000
	µg/ml	4.85	3.89	5.81	
	µmol/l	20.1	16.1	24.1	Beckman DxC
	µg/ml	5.08	4.07	6.09	
	µmol/l	20.2	16.2	24.2	Gravimetric
	µg/ml	5.10	4.09	6.11	
Primidone	µmol/l	12.3	9.84	14.8	Gravimetric
	µg/ml	2.69	2.15	3.23	
Progesterone	nmol/l	3.12	2.50	3.74	Abbott Architect
	ng/ml	0.977	0.783	1.17	
	nmol/l	4.60	3.68	5.52	BioMerieux Vidas
	ng/ml	1.44	1.15	1.73	
	nmol/l	2.29	1.26	3.32	Siemens Centaur XP/XPT/Classic
	ng/ml	0.720	0.394	1.04	

IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 2090EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Progesterone	nmol/l	3.03	2.42	3.64	Siemens Immulite 2000/2500
	ng/ml	0.948	0.757	1.14	
	nmol/l	3.04	2.43	3.65	Siemens Immulite 1000
	ng/ml	0.952	0.761	1.14	
	nmol/l	2.91	2.33	3.49	Beckman Dxl Prog Cal 33555
	ng/ml	0.911	0.729	1.09	
	nmol/l	3.48	2.78	4.18	Roche Elecsys (Prog. II)
	ng/ml	1.09	0.870	1.31	
	nmol/l	2.97	2.38	3.56	Beckman Access Prog Cal 33555
	ng/ml	0.930	0.745	1.12	
	nmol/l	2.29	1.83	2.75	Tosoh Series
	ng/ml	0.717	0.573	0.861	
	nmol/l	2.64	2.11	3.17	Vitros ECI
	ng/ml	0.826	0.660	0.992	
	nmol/l	3.50	2.80	4.20	Roche Cobas 4000/e411 (Prog. II)
	ng/ml	1.10	0.876	1.32	
	nmol/l	3.47	2.78	4.16	Roche Cobas 6000/8000 (Prog. II)
	ng/ml	1.09	0.870	1.31	
	nmol/l	2.29	1.83	2.75	Beckman Dxl Prog DE Cal A80773
	ng/ml	0.717	0.573	0.861	
	nmol/l	2.52	1.39	3.65	Siemens Centaur CP
	ng/ml	0.789	0.434	1.14	
	nmol/l	3.36	2.69	4.03	Roche Cobas 6000/8000 (Prog. III)
	ng/ml	1.05	0.842	1.26	
	nmol/l	3.28	2.62	3.94	Roche Elecsys (Prog. III)
	ng/ml	1.03	0.820	1.24	
	nmol/l	3.46	2.77	4.15	Roche Cobas 4000/e411 (Prog. III)
	ng/ml	1.08	0.867	1.29	
Prolactin	µU/ml	151	121	181	Abbott Architect
	µU/ml	154	123	185	BioMerieux Vidas
	µU/ml	140	98.0	182	Siemens Centaur XP/XPT/Classic
	µU/ml	134	107	161	Siemens Immulite 2000/2500
	µU/ml	146	117	175	Siemens Immulite 1000
	µU/ml	126	101	151	Beckman Dxl800
	µU/ml	132	106	158	Roche Elecsys
	µU/ml	154	123	185	Diasorin Liaison
	µU/ml	129	103	155	Beckman Access
	µU/ml	195	156	234	Vitros ECI
	µU/ml	125	100	150	Roche Elecsys/E170/Cobas 6000/8000 PRLII
	µU/ml	160	128	192	Immunotech IRMA
	µU/ml	131	105	157	Roche Cobas E411
	µU/ml	125	100	150	Roche Cobas 6000/8000
	µU/ml	180	144	216	SNIBE Maglumi Analysers
	µU/ml	152	122	182	Abbott Architect restandardised
	µU/ml	136	95.2	177	Siemens Centaur CP

IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 2090EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Prolactin	µU/ml	136	109	163	Siemens Atellica IM
	µU/ml	154	123	185	Diasorin Liaison XL
PSA Free	ng/ml = µg/l	1.33	0.998	1.66	Abbott Architect
	ng/ml = µg/l	2.48	1.86	3.10	BioMerieux Vidas
	ng/ml = µg/l	1.14	0.855	1.43	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	1.10	0.825	1.38	Siemens Immulite 2000/2500
	ng/ml = µg/l	1.49	1.12	1.86	Beckman DXI standardised to Hybritech
	ng/ml = µg/l	0.983	0.737	1.23	Roche Elecsys
	ng/ml = µg/l	0.744	0.558	0.930	Diasorin Liaison
	ng/ml = µg/l	1.50	1.13	1.88	Beckman Access standardised to Hybritech
	ng/ml = µg/l	0.917	0.688	1.15	Tosoh Series
	ng/ml = µg/l	0.973	0.730	1.22	Roche Cobas E411
	ng/ml = µg/l	0.962	0.722	1.20	Roche Cobas 6000/8000
	ng/ml = µg/l	1.26	0.945	1.58	Beckman Dxl800 standardised to WHO IRP96/670
	ng/ml = µg/l	0.694	0.521	0.868	SNIBE Maglumi Analysers
	ng/ml = µg/l	0.578	0.434	0.723	Ortho Vitros 3600/5600/ECi PSA II
	ng/ml = µg/l	1.13	0.850	1.41	Siemens Atellica IM
	ng/ml = µg/l	0.892	0.670	1.12	Diasorin Liaison XL
PSA Total	ng/ml = µg/l	1.25	0.938	1.56	Abbott Architect
	ng/ml = µg/l	1.63	1.22	2.04	BioMerieux Vidas
	ng/ml = µg/l	1.73	1.30	2.16	bioMerieux VIDAS TPSA
	ng/ml = µg/l	1.47	1.10	1.84	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	0.823	0.617	1.03	Siemens Immulite 2000/2500 1st generation
	ng/ml = µg/l	0.951	0.713	1.19	Siemens Immulite 1000 3rd generation
	ng/ml = µg/l	0.948	0.711	1.19	Siemens Immulite 1000 1st generation
	ng/ml = µg/l	1.86	1.40	2.33	Beckman Dxl standardised to Hybritech
	ng/ml = µg/l	1.58	1.19	1.98	Beckman Dxl800 standardised to WHO IRP96/670
	ng/ml = µg/l	1.77	1.33	2.21	Roche Elecsys
	ng/ml = µg/l	0.925	0.694	1.16	Diasorin Liaison
	ng/ml = µg/l	1.74	1.31	2.18	Roche Modular E170
	ng/ml = µg/l	1.87	1.40	2.34	Beckman Access standardised to Hybritech
	ng/ml = µg/l	1.87	1.40	2.34	Beckman Access standardised to WHO IRP96/670
	ng/ml = µg/l	1.12	0.840	1.40	Tosoh Series
	ng/ml = µg/l	1.62	1.22	2.03	Vitros ECi
	ng/ml = µg/l	2.20	1.65	2.75	CIS RIA Coated tube
	ng/ml = µg/l	1.76	1.32	2.20	Roche Cobas E411
	ng/ml = µg/l	1.80	1.35	2.25	Roche Cobas 6000/8000
	ng/ml = µg/l	1.84	1.38	2.30	SNIBE Maglumi Analysers
	ng/ml = µg/l	1.18	0.885	1.48	Fujirebio Lumipulse G Series
	ng/ml = µg/l	1.69	1.27	2.11	Ortho Vitros 3600/5600/ECi PSA II
	ng/ml = µg/l	1.38	1.04	1.72	Siemens Centaur CP
	ng/ml = µg/l	1.50	1.13	1.88	Siemens Atellica IM
	ng/ml = µg/l	0.887	0.670	1.11	Diasorin Liaison XL
Salicylic Acid	mmol/l	0.286	0.230	0.340	Gravimetric
	mg/dl	3.95	3.18	4.70	
SHBG	nmol/l	11.5	9.20	13.8	Siemens Centaur XP/XPT/Classic

IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 2090EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
SHBG	nmol/l	11.0	8.80	13.2	Siemens Immulite 2000/2500
	nmol/l	12.9	10.3	15.5	Roche Elecsys
	nmol/l	10.7	8.56	12.8	Abbott Architect
	nmol/l	12.5	10.0	15.0	Roche Cobas E411
	nmol/l	11.9	9.52	14.3	Roche Cobas 6000/8000
	nmol/l	10.8	8.64	13.0	Beckman Dxl800
T Uptake	%U	33.8	27.7	39.9	Siemens Immulite 2000
Testosterone	nmol/l	2.04	1.63	2.45	Abbott Architect
	ng/ml	0.588	0.469	0.707	
	ng/dl	58.8	46.9	70.7	
	nmol/l	0.990	0.792	1.19	BioMerieux Vidas
	ng/ml	0.285	0.228	0.342	
	ng/dl	28.5	22.8	34.2	
	nmol/l	1.62	1.05	2.19	Siemens Centaur XP/XPT/Classic
	ng/ml	0.467	0.304	0.630	
	ng/dl	46.7	30.4	63.0	
	nmol/l	1.31	1.05	1.57	Siemens Immulite 1000
	ng/ml	0.377	0.302	0.452	
	ng/dl	37.7	30.2	45.2	
	nmol/l	1.46	1.17	1.75	Beckman Dxl800
	ng/ml	0.420	0.337	0.503	
	ng/dl	42.0	33.7	50.3	
	nmol/l	1.62	1.30	1.94	Beckman Access
	ng/ml	0.467	0.374	0.560	
	ng/dl	46.7	37.4	56.0	
	nmol/l	1.16	0.928	1.39	Tosoh Series
	ng/ml	0.334	0.267	0.401	
	ng/dl	33.4	26.7	40.1	
	nmol/l	0.866	0.693	1.04	Vitros ECI
	ng/ml	0.249	0.200	0.298	
	ng/dl	24.9	20.0	29.8	
	nmol/l	1.76	1.41	2.11	Roche Cobas 6000 Test 2
	ng/ml	0.507	0.406	0.608	
	ng/dl	50.7	40.6	60.8	
	nmol/l	1.76	1.41	2.11	Roche Elecsys Test II
	ng/ml	0.507	0.406	0.608	
	ng/dl	50.7	40.6	60.8	
	nmol/l	1.75	1.40	2.10	Roche Modular E170 Test II
	ng/ml	0.504	0.403	0.605	
	ng/dl	50.4	40.3	60.5	
	nmol/l	1.86	1.49	2.23	Roche Cobas 4000/e411 Test II
	ng/ml	0.536	0.429	0.643	
	ng/dl	53.6	42.9	64.3	
	nmol/l	0.557	0.446	0.668	SNIBE Maglumi Analysers
	ng/ml	0.160	0.128	0.192	
	ng/dl	16.0	12.8	19.2	

IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 2090EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Testosterone	nmol/l	2.02	1.62	2.42	Abbott Architect 2nd Generation
	ng/ml	0.582	0.467	0.697	
	ng/dl	58.2	46.7	69.7	
	nmol/l	1.65	1.07	2.23	Siemens Centaur CP
	ng/ml	0.475	0.309	0.641	
	ng/dl	47.5	30.9	64.1	
	nmol/l	1.00	0.800	1.20	BioMerieux Vidas Testosterone II
	ng/ml	0.288	0.230	0.346	
	ng/dl	28.8	23.0	34.6	
	nmol/l	1.60	0.960	2.24	Siemens Centaur TST II
	ng/ml	0.461	0.277	0.645	
	ng/dl	46.1	27.7	64.5	
Theophylline	nmol/l	0.996	0.800	1.20	Diasorin Liaison XL
	ng/ml	0.290	0.230	0.350	
	ng/dl	28.7	23.0	34.6	
	µmol/l	28.9	23.1	34.7	Roche Integra
	µg/ml	5.21	4.16	6.26	
	µmol/l	23.7	19.0	28.4	Abbott Architect
	µg/ml	4.27	3.42	5.12	
	µmol/l	27.0	21.6	32.4	Roche Cobas 6000/8000
	µg/ml	4.87	3.89	5.85	
	µmol/l	25.0	20.0	30.0	Beckman DxC
	µg/ml	4.51	3.60	5.42	
	µmol/l	28.3	22.6	34.0	Gravimetric
	µg/ml	5.10	4.07	6.13	
Thyroglobulin	ng/ml	2.97	2.23	3.71	Roche Elecsys
	ng/ml	2.11	1.58	2.64	Beckman Dxl800
	ng/ml	3.14	2.36	3.93	Roche Cobas E411
	ng/ml	3.07	2.30	3.84	Roche Cobas 6000/8000
	ng/ml	2.21	1.66	2.76	Beckman Access
	ng/ml	3.15	2.36	3.94	Tosoh Series
	ng/ml	3.09	2.32	3.86	Roche Cobas 6000 TGII
	ng/ml	3.30	2.48	4.13	Roche Elecsys TGII
	ng/ml	3.09	2.32	3.86	Roche Cobas 4000/E411 TGII
Thyroid Stimulating Hormone	ng/ml	0.375	0.280	0.470	Diasorin Liaison
	µU/ml = mIU/l	0.112	0.090	0.134	Abbott Architect
	µU/ml = mIU/l	0.081	0.065	0.097	bioMerieux VIDAS TSH
	µU/ml = mIU/l	0.126	0.086	0.166	Siemens Centaur XP/XPT/Classic
	µU/ml = mIU/l	0.116	0.079	0.153	Siemens Centaur XP/XPT/Classic 3rd Generation
	µU/ml = mIU/l	0.128	0.102	0.154	Siemens Immulite 2000/2500
	µU/ml = mIU/l	0.155	0.124	0.186	Siemens Immulite 1000
	µU/ml = mIU/l	0.103	0.082	0.124	Beckman Dxl800 Fast TSH
	µU/ml = mIU/l	0.104	0.083	0.125	Beckman Dxl800
	µU/ml = mIU/l	0.151	0.121	0.181	Roche Elecsys
	µU/ml = mIU/l	0.146	0.117	0.175	Diasorin Liaison
	µU/ml = mIU/l	0.108	0.086	0.130	Beckman Access Fast TSH

IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 2090EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Thyroid Stimulating Hormone	µU/ml = mIU/l	0.106	0.085	0.127	Beckman Access hyperTSH 3rd Generation
	µU/ml = mIU/l	0.143	0.114	0.172	Tosoh Series
	µU/ml = mIU/l	0.254	0.203	0.305	Vitros ECI
	µU/ml = mIU/l	0.149	0.119	0.179	Roche Cobas E411
	µU/ml = mIU/l	0.155	0.124	0.186	Roche Cobas 6000/8000
	µU/ml = mIU/l	0.103	0.082	0.124	Beckman Dxl800 Hyper TSH
	µU/ml = mIU/l	0.165	0.132	0.198	SNIBE Maglumi Analysers
	µU/ml = mIU/l	0.127	0.086	0.168	Siemens Centaur XP/XPT/Classic TSH3-Ultra
	µU/ml = mIU/l	0.131	0.089	0.173	Siemens Centaur CP
	µU/ml = mIU/l	0.131	0.089	0.173	Siemens Centaur CP TSH3-Ultra
	µU/ml = mIU/l	0.104	0.083	0.125	Beckman Dxl 600/800 Access (3rd IS)
	µU/ml = mIU/l	0.118	0.090	0.140	Siemens Atellica IM
	µU/ml = mIU/l	0.205	0.160	0.250	Diasorin Liaison XL
Tobramycin	µmol/l	4.17	3.34	5.00	Gravimetric
	µg/ml	1.95	1.56	2.34	
Total Beta hCG	mU/ml=IU/l	14.4	11.5	17.3	Abbott Architect
	IU/ml	0.014	0.012	0.016	
	mU/ml=IU/l	20.5	16.4	24.6	BioMerieux Vidas
	IU/ml	0.021	0.016	0.026	
	mU/ml=IU/l	19.1	11.5	26.7	Siemens Centaur XP/XPT/Classic
	IU/ml	0.019	0.011	0.027	
	mU/ml=IU/l	22.4	17.9	26.9	Siemens Dimension
	IU/ml	0.022	0.018	0.026	
	mU/ml=IU/l	26.9	21.5	32.3	Siemens Immulite 2000
	IU/ml	0.027	0.022	0.032	
	mU/ml=IU/l	27.4	21.9	32.9	Siemens Immulite 1000
	IU/ml	0.027	0.022	0.032	
	mU/ml=IU/l	16.0	12.8	19.2	Beckman Dxl800
	IU/ml	0.016	0.013	0.019	
	mU/ml=IU/l	13.8	11.0	16.6	Diasorin Liaison
	IU/ml	0.014	0.011	0.017	
	mU/ml=IU/l	15.2	12.2	18.2	Roche Cobas Core EIA
	IU/ml	0.015	0.012	0.018	
	mU/ml=IU/l	15.6	12.5	18.7	Beckman Access
	IU/ml	0.016	0.013	0.019	
	mU/ml=IU/l	21.1	16.9	25.3	Tosoh Series
	IU/ml	0.021	0.017	0.025	
	mU/ml=IU/l	22.9	18.3	27.5	Vitros ECI
	IU/ml	0.023	0.018	0.028	
	mU/ml=IU/l	12.3	9.84	14.8	Roche STAT (Intact)
	IU/ml	0.012	0.010	0.014	
	mU/ml=IU/l	14.6	11.7	17.5	Roche hCG+Beta
	IU/ml	0.015	0.012	0.018	
	mU/ml=IU/l	14.3	11.4	17.2	SNIBE Maglumi Analysers
	IU/ml	0.014	0.011	0.017	
	mU/ml=IU/l	14.2	11.4	17.0	Radiometer AQT90 Flex
	IU/ml	0.014	0.011	0.017	

IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 2090EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Total Beta hCG	mU/ml=IU/l	15.9	12.7	19.1	Beckman Access Total BhCG (5th IS)
	IU/ml	0.016	0.013	0.019	
	mU/ml=IU/l	16.4	13.1	19.7	Beckman Dxl Total BhCG (5th IS)
	IU/ml	0.016	0.013	0.019	
	mU/ml=IU/l	16.9	10.1	23.7	Siemens Centaur CP
	IU/ml	0.017	0.010	0.024	
	mU/ml=IU/l	16.8	13.4	20.1	Siemens Atellica IM
	IU/ml	0.017	0.013	0.021	
	mU/ml=IU/l	12.8	10.2	15.4	Diasorin Liaison XL
	IU/ml	0.010	0.010	0.020	
Total T3	nmol/l	0.783	0.587	0.979	Abbott Architect
	ng/ml	0.510	0.382	0.638	
	ng/dl	51.0	38.2	63.8	
	nmol/l	0.637	0.478	0.796	BioMerieux Vidas
	ng/ml	0.415	0.311	0.519	
	ng/dl	41.5	31.1	51.9	
	nmol/l	0.662	0.497	0.827	Siemens Centaur XP/XPT/Classic
	ng/ml	0.431	0.323	0.539	
	ng/dl	43.1	32.3	53.9	
	nmol/l	0.617	0.463	0.771	Siemens Immulite 2000/2500
	ng/ml	0.402	0.301	0.503	
	ng/dl	40.2	30.1	50.3	
	nmol/l	0.617	0.463	0.771	Siemens Immulite 1000
	ng/ml	0.402	0.301	0.503	
	ng/dl	40.2	30.1	50.3	
	nmol/l	0.914	0.686	1.14	Beckman Dxl800
	ng/ml	0.595	0.447	0.743	
	ng/dl	59.5	44.7	74.3	
	nmol/l	1.31	0.983	1.64	Roche Elecsys
	ng/ml	0.853	0.640	1.07	
	ng/dl	85.3	64.0	107	
	nmol/l	1.06	0.795	1.33	Diasorin Liaison
	ng/ml	0.690	0.518	0.862	
	ng/dl	69.0	51.8	86.2	
	nmol/l	0.920	0.690	1.15	Beckman Access
	ng/ml	0.599	0.449	0.749	
	ng/dl	59.9	44.9	74.9	
	nmol/l	0.630	0.473	0.788	Tosoh Series
	ng/ml	0.410	0.308	0.512	
	ng/dl	41.0	30.8	51.2	
	nmol/l	0.886	0.665	1.11	Vitros ECI
	ng/ml	0.577	0.433	0.721	
	ng/dl	57.7	43.3	72.1	
	nmol/l	0.592	0.444	0.740	CIS RIA Coated tube
	ng/ml	0.385	0.289	0.481	
	ng/dl	38.5	28.9	48.1	

IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 2090EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Total T3	nmol/l	1.42	1.07	1.78	Roche Cobas E411
	ng/ml	0.924	0.697	1.15	
	ng/dl	92.4	69.7	115	
	nmol/l	1.23	0.923	1.54	Roche Cobas 6000/8000
	ng/ml	0.801	0.601	1.00	
	ng/dl	80.1	60.1	100	
	nmol/l	0.494	0.371	0.618	SNIBE Maglumi Analysers
	ng/ml	0.322	0.242	0.402	
	ng/dl	32.2	24.2	40.2	
Total T4	nmol/l	32.9	24.7	41.1	Abbott Architect
	µg/dl	2.57	1.93	3.21	
	ng/ml	25.7	19.3	32.1	
	nmol/l	29.6	22.2	37.0	BioMerieux Vidas
	µg/dl	2.31	1.73	2.89	
	ng/ml	23.1	17.3	28.9	
	nmol/l	20.8	14.6	27.0	Siemens Centaur XP/XPT/Classic
	µg/dl	1.62	1.13	2.11	
	ng/ml	16.2	11.3	21.1	
	nmol/l	21.9	16.4	27.4	Siemens Immulite 2000/2500
	µg/dl	1.71	1.28	2.14	
	ng/ml	17.1	12.8	21.4	
	nmol/l	20.9	15.7	26.1	Beckman Dxl800
	µg/dl	1.63	1.22	2.04	
	ng/ml	16.3	12.2	20.4	
	nmol/l	35.3	26.5	44.1	Roche Elecsys
	µg/dl	2.75	2.07	3.43	
	ng/ml	27.5	20.7	34.3	
	nmol/l	24.2	18.2	30.3	Beckman Access
	µg/dl	1.89	1.42	2.36	
	ng/ml	18.9	14.2	23.6	
	nmol/l	23.8	17.9	29.8	Tosoh Series
	µg/dl	1.86	1.40	2.32	
	ng/ml	18.6	14.0	23.2	
	nmol/l	27.0	20.3	33.8	Vitros ECI
	µg/dl	2.11	1.58	2.64	
	ng/ml	21.1	15.8	26.4	
	nmol/l	26.8	20.1	33.5	CIS RIA Coated tube
	µg/dl	2.09	1.57	2.61	
	ng/ml	20.9	15.7	26.1	
	nmol/l	36.2	27.2	45.3	Roche Cobas E411
	µg/dl	2.82	2.12	3.52	
	ng/ml	28.2	21.2	35.2	
	nmol/l	33.4	25.1	41.8	Roche Cobas 6000/8000
	µg/dl	2.61	1.96	3.26	
	ng/ml	26.1	19.6	32.6	

IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 2090EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Total T4	nmol/l	27.4	20.6	34.3	Immunotech IRMA
	µg/dl	2.14	1.61	2.67	
	ng/ml	21.4	16.1	26.7	
	nmol/l	30.9	23.2	38.6	ELISA
	µg/dl	2.41	1.81	3.01	
	ng/ml	24.1	18.1	30.1	
	nmol/l	30.2	22.7	37.8	SNIBE Maglumi Analysers
	µg/dl	2.36	1.77	2.95	
	ng/ml	23.6	17.7	29.5	
	nmol/l	23.0	16.1	29.9	Siemens Centaur CP
	µg/dl	1.79	1.25	2.33	
	ng/ml	17.9	12.5	23.3	
Valproic Acid	µmol/l	195	156	234	Abbott Architect
	µg/ml	28.1	22.5	33.7	
	µmol/l	228	160	296	Siemens Centaur XP/XPT/Classic
	µg/ml	32.9	23.0	42.8	
	µmol/l	201	161	241	Siemens Dimension
	µg/ml	29.0	23.2	34.8	
	µmol/l	191	153	229	Siemens Immulite 2000/2500
	µg/ml	27.6	22.1	33.1	
	µmol/l	199	159	239	Siemens Immulite 1000
	µg/ml	28.7	22.9	34.5	
	µmol/l	200	160	240	Roche Integra
	µg/ml	28.9	23.1	34.7	
	µmol/l	203	162	244	Roche Cobas 6000/8000
	µg/ml	29.3	23.4	35.2	
	µmol/l	166	133	199	Beckman DxC
	µg/ml	24.0	19.2	28.8	
	µmol/l	195	156	234	Beckman AU400/600/640/2700/5400
	µg/ml	28.1	22.5	33.7	
	µmol/l	243	194	291	Gravimetric
	µg/ml	35.0	28.0	42.0	
Vancomycin	µmol/l	4.04	3.23	4.85	Roche Integra
	µg/ml	6.00	4.80	7.20	
	µmol/l	3.41	2.73	4.09	Ortho Vitros Microslide Systems
	µg/ml	5.07	4.06	6.08	
	µmol/l	3.27	2.62	3.92	Abbott Architect
	µg/ml	4.86	3.89	5.83	
	µmol/l	3.04	2.43	3.65	Siemens Dimension
	µg/ml	4.52	3.61	5.43	
	µmol/l	3.39	2.71	4.07	Roche Cobas 6000/8000
	µg/ml	5.04	4.03	6.05	
	µmol/l	3.16	2.53	3.79	Thermo Scientific QMS Vancomycin
	µg/ml	4.69	3.76	5.62	
	µmol/l	3.43	2.74	4.12	Gravimetric
	µg/ml	5.10	4.07	6.12	

IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 2090EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Vitamin B12	pmol/l	147	118	176	Abbott Architect
	pg/ml	199	160	238	
	pmol/l	129	90.3	168	Siemens Centaur XP/XPT/Classic
	pg/ml	175	123	227	
	pmol/l	114	91.2	137	Siemens Immulite 2000
	pg/ml	154	124	184	
	pmol/l	95.7	76.6	115	Beckman Dxl800
	pg/ml	130	104	156	
	pmol/l	166	133	199	Roche Elecsys
	pg/ml	225	180	270	
	pmol/l	93.9	75.1	113	Beckman Access
	pg/ml	127	102	152	
	pmol/l	147	118	176	Tosoh Series
	pg/ml	199	160	238	
	pmol/l	149	119	179	Vitros ECI
	pg/ml	202	161	243	
	pmol/l	114	91.2	137	MP Biomedicals RIA
	pg/ml	154	124	184	
	pmol/l	181	145	217	Roche Cobas E411
	pg/ml	245	196	294	
	pmol/l	137	110	164	Roche Cobas 6000/8000
	pg/ml	186	149	223	
	pmol/l	132	92.4	172	Siemens Centaur CP
	pg/ml	179	125	233	

IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

CAT. NO. IA2639
CAT. NO. IA2633
LOT NO. 209IEC

GTIN: 05055273203851
GTIN: 05055273203837
EXPIRY: 2022-11-28

SIZE: 12 x 5 ml
SIZE: 4 x 5 ml

INTENDED USE

This product is intended for *in vitro* diagnostic use, as assayed quality control material to monitor the accuracy and reproducibility of analytes listed in the package insert.

This device is for prescription use only.

SAFETY PRECAUTIONS AND WARNINGS

For *in vitro* diagnostic use only. Do not pipette by mouth. Exercise the normal precautions required for handling laboratory reagents.

Human source material, from which this product has been derived, has been tested at donor level for the Human Immunodeficiency Virus (HIV 1, HIV 2) antibody, Hepatitis B Surface Antigen (HbsAg), and Hepatitis C Virus (HCV) antibody and found to be NON-REACTIVE. FDA approved methods have been used to conduct these tests.

However, since no method can offer complete assurance as to the absence of infectious agents, this material and all patient samples should be handled as though capable of transmitting infectious diseases and disposed of accordingly.

The Abbott Architect CA19-9 assay utilises an antibody/antigen system based on the 1116-NA-19-9 antibody. There are reports that the formulation employed with this system may return elevated concentrations, when compared to other methods for samples expressing high levels of 1116-NA-19-9 reactive determinants.

Health and Safety Data Sheets are available on request.

STORAGE AND STABILITY

OPENED: Store refrigerated (+2°C to +8°C). Reconstituted serum is stable for 7 days at +2°C to +8°C, if kept capped in original container and free from contamination, or 4 weeks frozen once at -20°C. C-Peptide is stable for 1 day at +2°C to +8°C.

Thyroglobulin should be tested within 4 hours of reconstitution when stored at +2°C to +8°C, or within 2 weeks when stored at -20°C. ACTH should be tested immediately after the 30-minute reconstitution period. No frozen stability claim is made for ACTH, Aldosterone and C-Peptide. Only the required amount of product should be removed. After use, any residual product should NOT BE RETURNED to the original vial.

UNOPENED: Store refrigerated (+2°C to +8°C). Stable to expiration date printed on individual vials.

Bacterial contamination of the reconstituted serum will cause reductions in the stability of many components. If bacterial contamination is suspected, the vial should be discarded and a fresh vial reconstituted.

PREPARATION

Immunoassay Premium is supplied lyophilised.

1. Carefully reconstitute each vial of lyophilised serum with exactly 5 ml of distilled water at +15°C to +25°C. Close the bottle and allow to stand for 30 minutes before use. Ensure contents are completely dissolved by swirling gently. Avoid formation of foam. Do not shake.
2. Refer to the Control section of the individual analyser application.
3. Refrigerate any unused material. Prior to reuse, mix contents thoroughly.

MATERIALS PROVIDED

Immunoassay Premium - Level 2: 12 x 5 ml Tri-Level: 4 x 5 ml

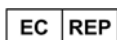
MATERIAL REQUIRED BUT NOT PROVIDED

Volumetric pipette

VALUE ASSIGNMENT

Each batch of Immunoassay Premium is submitted to a number of external laboratories. Values are assigned from a consensus of results obtained by these laboratories, using a unique statistical analysis. Average values should normally fall within the listed ranges for analytes in the instruments specified in this product insert. However, variations may be caused by instrument reagents and laboratory technique. Therefore, the range produced herein should only be considered as a reference and it is recommended that each laboratory establish its own mean and acceptable ranges. Aldosterone is present in control levels 2 and level 3 only. Parathyroid Hormone (PTH) is present in the control, but no claim is made for the expected value or stability of this analyte.

If a method is unavailable, contact Randox Laboratories - Technical Services, Northern Ireland, tel: +44 (0) 28 9445 1070 or email Technical.Services@randox.com.



Randox Teoranta, Meenmore,
Dungloe, Donegal,
F94 TV06, Ireland

27 Apr '21 ne

IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 2091EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
17-OH-Progesterone	nmol/l	15.1	11.3	18.9	DIAsource ELISA
	ng/ml	5.00	3.74	6.26	
25-OH Vitamin D	nmol/l	79.1	59.3	98.9	Siemens Centaur XP/XPT/Classic
	nmol/l	45.0	33.8	56.3	Roche Vitamin D Total
	nmol/l	47.1	35.3	58.9	Abbott Architect
	nmol/l	73.2	54.9	91.5	Vitros ECI
	nmol/l	57.5	43.1	71.9	BioMerieux Vidas
	nmol/l	45.8	34.4	57.3	Beckman Dxl 600/800
	nmol/l	49.8	37.4	62.3	Roche Vitamin D Total II
	nmol/l	61.9	46.4	77.4	Diasorin Liaison XL
	nmol/l	59.5	44.6	74.3	Diasorin Liaison
ACTH	pmol/l	4.86	3.65	6.08	Siemens Immulite 2000/2500
	pg/ml	22.1	16.6	27.6	
	pmol/l	2.44	1.83	3.05	Roche Cobas E411
	pg/ml	11.1	8.32	13.9	
	pmol/l	2.18	1.64	2.73	Roche Cobas 6000/8000
	pg/ml	9.91	7.45	12.4	
	pmol/l	4.84	3.63	6.05	Siemens Immulite 1000
Aldosterone	pmol/l	339	254	424	Diasorin Liaison XL
	pg/ml	122	91.6	153	
Alpha-fetoprotein	KIU/l = IU/ml	47.3	37.8	56.8	BioMerieux Vidas
	ng/ml	57.2	45.7	68.7	
	KIU/l = IU/ml	42.6	34.1	51.1	Beckman Access
	ng/ml	51.5	41.3	61.7	
	KIU/l = IU/ml	49.0	39.2	58.8	Vitros ECI
	ng/ml	51.0	40.8	61.2	
	KIU/l = IU/ml	52.2	41.2	63.2	Siemens Centaur XP/XPT/Classic
	ng/ml	63.2	49.9	76.5	
	KIU/l = IU/ml	46.6	37.3	55.9	Siemens Immulite 2000/2500
	ng/ml	56.4	45.1	67.7	
	KIU/l = IU/ml	45.2	36.2	54.2	Abbott Architect
	ng/ml	54.7	43.8	65.6	
	KIU/l = IU/ml	41.2	33.0	49.4	Beckman Dxl800
	ng/ml	49.9	39.9	59.9	
	KIU/l = IU/ml	50.7	40.6	60.8	Roche Cobas 6000/8000
	ng/ml	61.3	49.1	73.5	
	KIU/l = IU/ml	51.6	41.3	61.9	Roche Cobas E411
	ng/ml	62.4	50.0	74.8	
	KIU/l = IU/ml	50.7	40.5	60.8	Siemens Atellica IM
	ng/ml	61.3	49.0	73.6	
	KIU/l = IU/ml	50.6	40.5	60.7	Diasorin Liaison
	ng/ml	61.2	49.0	73.4	

IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 2091EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Alpha-fetoprotein	KIU/l = IU/ml	49.3	39.4	59.2	Diasorin Liaison XL
	ng/ml	59.7	47.7	71.6	
Amikacin	µmol/l	15.3	12.2	18.3	Gravimetric
	µg/ml	8.93	7.14	10.7	
Androstenedione	nmol/l	15.3	11.5	19.1	Siemens Immulite 2000
	ng/ml	4.39	3.30	5.48	
	nmol/l	9.31	6.98	11.6	Diasorin Liaison XL
	ng/ml	2.67	2.00	3.33	
Beta-2-microglobulin	µg/ml = mg/l	3.29	2.63	3.95	Siemens Immulite 1000
	µg/ml = mg/l	2.92	2.34	3.50	Siemens Immulite 2000/2500
	µg/ml = mg/l	3.28	2.62	3.94	Abbott Architect
	µg/ml = mg/l	3.33	2.66	4.00	Roche Cobas 6000/8000
	µg/ml = mg/l	3.05	2.44	3.66	Diasorin Liaison
C-Peptide	nmol/l	2.070	1.550	2.590	Siemens Immulite 2000/2500
	ng/ml	6.25	4.68	7.82	
	nmol/l	2.050	1.540	2.560	Roche Cobas 6000/8000
	ng/ml	6.19	4.65	7.73	
	nmol/l	2.020	1.520	2.530	Roche Cobas E411
	ng/ml	6.10	4.59	7.61	
	nmol/l	2.140	1.605	2.675	Diasorin Liaison XL
	ng/ml	6.46	4.85	8.08	
Carbamazepine	µmol/l	40.7	28.5	52.9	Siemens Centaur XP/XPT/Classic
	µg/ml	9.62	6.73	12.5	
	µmol/l	37.1	29.7	44.5	Abbott Architect
	µg/ml	8.77	7.02	10.5	
	µmol/l	36.4	29.1	43.7	Roche Cobas 6000/8000
	µg/ml	8.60	6.88	10.3	
	µmol/l	38.5	30.8	46.2	Gravimetric
	µg/ml	9.10	7.28	10.9	
Carcinoembryonic Antigen (CEA)	ng/ml = µg/l	23.7	19.0	28.4	BioMerieux Vidas
	ng/ml = µg/l	30.7	24.6	36.8	Siemens Immulite 1000
	ng/ml = µg/l	24.1	19.3	28.9	Vitros ECI
	ng/ml = µg/l	22.8	18.2	27.4	Beckman Access
	ng/ml = µg/l	25.5	17.3	33.7	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	28.3	22.6	34.0	Siemens Immulite 2000/2500
	ng/ml = µg/l	26.6	21.3	31.9	Abbott Architect
	ng/ml = µg/l	20.0	16.0	24.0	Diasorin Liaison
	ng/ml = µg/l	21.6	17.3	25.9	Beckman Dxl800
	ng/ml = µg/l	20.5	16.4	24.6	Roche Cobas 6000/8000
	ng/ml = µg/l	20.7	16.6	24.8	Roche Cobas E411
	ng/ml = µg/l	26.0	20.8	31.2	SNIBE Maglumi Analysers
	ng/ml = µg/l	23.8	19.0	28.5	Siemens Atellica IM
	ng/ml = µg/l	20.5	16.4	24.6	Diasorin Liaison XL

IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 2091EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Cortisol	nmol/l	655	491	819	Siemens Immulite 1000
	µg/dl	23.6	17.7	29.5	
	nmol/l	767	575	959	Roche Elecsys
	µg/dl	27.6	20.7	34.5	
	nmol/l	718	495	941	Siemens Centaur XP/XPT/Classic
	µg/dl	25.8	17.8	33.8	
	nmol/l	626	470	783	Siemens Immulite 2000/2500
	µg/dl	22.5	16.9	28.1	
	nmol/l	584	438	730	Vitros ECI
	µg/dl	21.0	15.8	26.2	
	nmol/l	553	415	691	Abbott Architect
	µg/dl	19.9	14.9	24.9	
	nmol/l	600	450	750	Beckman Dxl800
	µg/dl	21.6	16.2	27.0	
	nmol/l	761	571	951	Roche Cobas 6000/8000
	µg/dl	27.4	20.6	34.2	
	nmol/l	700	525	875	Roche Cobas E411
	µg/dl	25.2	18.9	31.5	
	nmol/l	651	488	814	Roche Cobas 4000/e411 Gen II
	µg/dl	23.4	17.6	29.2	
DHEA-S	nmol/l	602	452	753	Roche Cobas 6000/8000 Gen II
	µg/dl	21.7	16.3	27.1	
	nmol/l	753	565	941	Siemens Atellica IM
	µg/dl	27.1	20.3	33.9	
	nmol/l	714	536	893	Diasorin Liaison XL
	µg/dl	25.7	19.3	32.1	
	nmol/l	628	471	785	Diasorin Liaison
	µg/dl	22.6	17.0	28.3	
Digoxin	µmol/l	11.2	8.96	13.4	Siemens Immulite 2000/2500
	µmol/l	12.1	9.68	14.5	Abbott Architect
	µmol/l	10.3	8.24	12.4	Beckman Dxl800
	µmol/l	11.1	7.22	15.0	Siemens Centaur XP/XPT/Classic
	µmol/l	15.2	12.2	18.2	Roche Cobas E411
	µmol/l	14.9	11.9	17.9	Roche Cobas 6000/8000
	µmol/l	11.4	9.14	13.7	Siemens Atellica IM
	µmol/l	11.4	9.12	13.7	Diasorin Liaison XL
	nmol/l	3.19	2.55	3.83	Siemens Immulite 2000/2500
	ng/ml	2.49	1.99	2.99	
	nmol/l	3.22	2.48	3.96	Siemens Centaur XP/XPT/Classic
	ng/ml	2.51	1.93	3.09	
	nmol/l	2.51	2.01	3.01	Abbott Architect
	ng/ml	1.96	1.57	2.35	
	nmol/l	2.98	2.38	3.58	Beckman Dxl800
	ng/ml	2.33	1.86	2.80	
	nmol/l	3.07	2.46	3.68	Gravimetric
	ng/ml	2.40	1.92	2.87	

IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 2091EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Ethosuximide	µmol/l	360	288	431	Gravimetric
	µg/ml	51.0	40.8	61.1	
Ferritin	ng/ml = µg/l	72.7	58.2	87.2	BioMerieux Vidas
	ng/ml = µg/l	76.8	61.4	92.2	Siemens Immulite 1000
	ng/ml = µg/l	109	87.2	131	Roche Elecsys
	ng/ml = µg/l	68.5	54.8	82.2	Beckman Access
	ng/ml = µg/l	62.9	50.3	75.5	Vitros ECI
	ng/ml = µg/l	87.9	65.9	110	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	85.8	68.6	103	Siemens Immulite 2000/2500
	ng/ml = µg/l	107	85.6	128	Abbott Architect
	ng/ml = µg/l	104	83.2	125	Roche Modular E170
	ng/ml = µg/l	67.7	54.2	81.2	Beckman Dxl800
	ng/ml = µg/l	88.0	70.4	106	Siemens Atellica IM
	ng/ml = µg/l	99.1	79.3	119	Diasorin Liaison
	ng/ml = µg/l	106	84.8	127	Diasorin Liaison XL
Folate	nmol/l	13.7	10.4	17.0	Beckman Access
	ng/ml	6.04	4.59	7.49	
	nmol/l	9.99	7.59	12.4	Siemens Immulite 2000
	ng/ml	4.41	3.35	5.47	
	nmol/l	9.69	7.36	12.0	Vitros ECI
	ng/ml	4.27	3.25	5.29	
	nmol/l	12.2	9.27	15.1	Abbott Architect
	ng/ml	5.38	4.09	6.67	
	nmol/l	26.8	17.4	36.2	Siemens Centaur XP/XPT/Classic (enhanced kit)
	ng/ml	11.8	7.67	15.9	
	nmol/l	14.0	10.6	17.4	Beckman Dxl800
	ng/ml	6.17	4.67	7.67	
	nmol/l	13.0	9.88	16.1	Roche Cobas E411
	ng/ml	5.73	4.36	7.10	
	nmol/l	12.7	9.65	15.7	Roche Cobas 6000/8000 Folate III
	ng/ml	5.60	4.26	6.94	
	nmol/l	24.2	18.4	30.0	Siemens Atellica IM
	ng/ml	10.7	8.11	13.2	
Free T3	pmol/l	15.0	11.3	18.8	Roche Elecsys
	ng/dl	0.975	0.735	1.22	
	pg/ml	9.77	7.36	12.2	
	pmol/l	11.0	8.25	13.8	Beckman Access
	ng/dl	0.715	0.536	0.894	
	pg/ml	7.16	5.37	8.95	
	pmol/l	30.7	23.0	38.4	Vitros ECI
	ng/dl	2.00	1.50	2.50	
	pg/ml	20.0	15.0	25.0	
	pmol/l	13.2	7.92	18.5	Siemens Centaur XP/XPT/Classic
	ng/dl	0.858	0.515	1.20	
	pg/ml	8.59	5.15	12.0	
	pmol/l	9.32	6.99	11.7	Siemens Immulite 2000/2500
	ng/dl	0.606	0.454	0.758	
	pg/ml	6.07	4.55	7.59	

IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 2091EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Free T3	pmol/l	11.2	8.40	14.0	Abbott Architect
	ng/dl	0.728	0.546	0.910	
	pg/ml	7.29	5.47	9.11	
	pmol/l	17.4	13.1	21.8	Diasorin Liaison
	ng/dl	1.13	0.852	1.41	
	pg/ml	11.3	8.53	14.1	
	pmol/l	9.53	7.15	11.9	Beckman Dxl800
	ng/dl	0.619	0.465	0.773	
	pg/ml	6.20	4.65	7.75	
	pmol/l	14.9	11.2	18.6	Roche Cobas E411
	ng/dl	0.969	0.728	1.21	
	pg/ml	9.70	7.29	12.1	
	pmol/l	15.0	11.3	18.8	Roche Cobas 6000/8000
	ng/dl	0.975	0.735	1.22	
	pg/ml	9.77	7.36	12.2	
	pmol/l	12.3	9.23	15.4	SNIBE Maglumi Analysers
	ng/dl	0.800	0.600	1.00	
	pg/ml	8.01	6.01	10.0	
	pmol/l	12.7	7.62	17.8	Siemens Centaur CP
	ng/dl	0.826	0.496	1.16	
	pg/ml	8.27	4.96	11.6	
	pmol/l	13.4	10.0	16.7	Siemens Atellica IM
	ng/dl	0.870	0.650	1.09	
	pg/ml	8.71	6.51	10.9	
	pmol/l	18.3	13.7	22.9	Diasorin Liaison XL
	ng/dl	1.19	0.890	1.49	
	pg/ml	11.9	8.92	14.9	
Free T4	pmol/l	45.9	34.4	57.4	Siemens Immulite 1000
	ng/dl	3.58	2.68	4.48	
	pg/ml	35.8	26.8	44.8	
	pmol/l	43.0	32.3	53.8	Roche Elecsys
	ng/dl	3.35	2.52	4.18	
	pg/ml	33.5	25.2	41.8	
	pmol/l	33.6	25.2	42.0	Beckman Access
	ng/dl	2.62	1.97	3.27	
	pg/ml	26.2	19.7	32.7	
	pmol/l	78.0	58.5	97.5	Vitros Eci
	ng/dl	6.08	4.56	7.60	
	pg/ml	60.8	45.6	76.0	
	pmol/l	30.2	22.7	37.8	Siemens Centaur XP/XPT/Classic
	ng/dl	2.36	1.77	2.95	
	pg/ml	23.6	17.7	29.5	
	pmol/l	42.9	32.2	53.6	Siemens Immulite 2000/2500
	ng/dl	3.35	2.51	4.19	
	pg/ml	33.5	25.1	41.9	

IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 2091EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Free T4	pmol/l	29.7	22.3	37.1	Abbott Architect
	ng/dl	2.32	1.74	2.90	
	pg/ml	23.2	17.4	29.0	
	pmol/l	49.6	37.2	62.0	Diasorin Liaison
	ng/dl	3.87	2.90	4.84	
	pg/ml	38.7	29.0	48.4	
	pmol/l	34.5	25.9	43.1	Beckman Dxl800
	ng/dl	2.69	2.02	3.36	
	pg/ml	26.9	20.2	33.6	
	pmol/l	39.8	29.9	49.8	Roche Cobas 6000/8000
	ng/dl	3.10	2.33	3.87	
	pg/ml	31.0	23.3	38.7	
	pmol/l	40.6	30.5	50.8	Roche Cobas E411
	ng/dl	3.17	2.38	3.96	
	pg/ml	31.7	23.8	39.6	
	pmol/l	45.4	34.1	56.8	Biomerieux Vidas FT4N Kit
	ng/dl	3.54	2.66	4.42	
	pg/ml	35.4	26.6	44.2	
	pmol/l	32.3	24.2	40.4	Siemens Centaur CP
	ng/dl	2.52	1.89	3.15	
	pg/ml	25.2	18.9	31.5	
	pmol/l	32.5	24.4	40.6	Siemens Atellica IM
	ng/dl	2.54	1.90	3.17	
	pg/ml	25.4	19.0	31.7	
	pmol/l	53.4	40.1	66.8	Diasorin Liaison XL
	ng/dl	4.17	3.13	5.21	
	pg/ml	41.7	31.3	52.1	
FSH	mU/ml	29.8	23.8	35.8	BioMerieux Vidas
	mU/ml	28.7	23.0	34.4	Beckman Access
	mU/ml	25.7	20.6	30.8	Roche/BM Elecsys
	mU/ml	21.1	16.9	25.3	Vitros ECi
	mU/ml	35.6	26.7	44.5	Siemens Centaur XP/XPT/Classic
	mU/ml	27.9	22.3	33.5	Siemens Immulite 2000/2500
	mU/ml	24.1	19.3	28.9	Abbott Architect
	mU/ml	32.0	25.6	38.4	Diasorin Liaison
	mU/ml	29.7	23.8	35.6	Beckman Dxl800
	mU/ml	27.7	22.2	33.2	Roche Cobas E411
	mU/ml	26.1	20.9	31.3	Roche Cobas 6000/8000
	mU/ml	37.0	29.6	44.4	Siemens Atellica IM
	mU/ml	39.6	31.7	47.5	Diasorin Liaison XL
Gentamicin	µmol/l	8.16	6.53	9.79	Gravimetric
	µg/ml	3.90	3.12	4.68	
Growth Hormone (GH)	µU/ml	18.4	14.7	22.1	Siemens Immulite 1000
	ng/ml	6.13	4.90	7.36	
	µU/ml	19.3	15.4	23.2	Siemens Immulite 2000/2500
	ng/ml	6.43	5.13	7.73	

IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 2091EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Growth Hormone (GH)	µU/ml	14.6	11.7	17.5	Beckman Dxl800
	ng/ml	4.86	3.90	5.82	
	µU/ml	16.1	12.9	19.3	Diasorin Liaison
	ng/ml	5.36	4.30	6.42	
	µU/ml	16.8	13.4	20.2	Roche Cobas 6000/8000
	ng/ml	5.59	4.46	6.72	
	µU/ml	15.6	12.5	18.7	Diasorin Liaison XL
	ng/ml	5.19	4.16	6.23	
Immunoglobulin E	KIU/I = IU/ml	108	86.4	130	Siemens Immulite 1000
	KIU/I = IU/ml	98.9	79.1	119	BioMerieux Vidas
	KIU/I = IU/ml	101	60.6	141	Siemens Centaur XP/XPT/Classic
	KIU/I = IU/ml	102	81.6	122	Siemens Immulite 2000/2500
	KIU/I = IU/ml	101	80.8	121	Abbott Architect
	KIU/I = IU/ml	112	89.6	134	Roche Cobas E411
	KIU/I = IU/ml	112	89.6	134	Roche Cobas 6000/8000
	KIU/I = IU/ml	103	82.0	123	Siemens Atellica IM
Insulin	mU/I	18.2	13.7	22.7	Siemens Centaur XP/XPT/Classic
	µU/ml	18.2	13.7	22.7	
	mU/I	15.3	11.5	19.1	Abbott Architect
	µU/ml	15.3	11.5	19.1	
	mU/I	16.3	12.2	20.4	Roche Cobas E411
	µU/ml	16.3	12.2	20.4	
	mU/I	16.6	12.5	20.8	Roche Cobas 6000/8000
	µU/ml	16.6	12.5	20.7	
	mU/I	14.5	10.9	18.1	Beckman Dxl 600/800
	µU/ml	14.5	10.9	18.1	
	mU/I	18.5	13.8	23.1	Siemens Atellica IM
	µU/ml	18.5	13.8	23.1	
	mU/I	20.6	15.5	25.8	Diasorin Liaison
	µU/ml	20.6	15.5	25.8	
	mU/I	20.9	15.7	26.1	Diasorin Liaison XL
	µU/ml	20.9	15.7	26.1	
Luteinising Hormone (LH)	mU/ml	23.7	19.0	28.4	Beckman Access
	mU/ml	29.6	23.7	35.5	BioMerieux Vidas
	mU/ml	50.0	40.0	60.0	Siemens Immulite 1000
	mU/ml	33.0	26.4	39.6	Roche Elecsys
	mU/ml	47.0	37.6	56.4	Vitros ECI
	mU/ml	33.8	26.0	41.6	Siemens Centaur XP/XPT/Classic
	mU/ml	49.0	39.2	58.8	Siemens Immulite 2000
	mU/ml	28.0	22.4	33.6	Abbott Architect
	mU/ml	40.4	32.3	48.5	Diasorin Liaison
	mU/ml	23.9	19.1	28.7	Beckman Dxl800
	mU/ml	36.0	28.8	43.2	Roche Cobas E411
	mU/ml	36.4	29.1	43.7	Roche Cobas 6000/8000
	mU/ml	39.5	31.6	47.4	Diasorin Liaison XL

IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 2091EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Luteinising Hormone	mU/ml	34.8	27.9	41.8	Siemens Atellica IM
Oestradiol	pmol/l	1361	1089	1633	BioMerieux Vidas
	pg/ml	370	296	444	
	pmol/l	917	734	1100	Roche Elecsys (Estradiol II)
	pg/ml	249	200	298	
	pmol/l	1207	966	1448	Vitros ECI
	pg/ml	328	263	393	
	pmol/l	1241	993	1489	Beckman Access
	pg/ml	338	270	406	
	pmol/l	1283	770	1796	Siemens Centaur XP/XPT/Classic
	pg/ml	349	209	489	
	pmol/l	1159	927	1391	Siemens Immulite 2000/2500
	pg/ml	315	252	378	
	pmol/l	837	670	1004	Abbott Architect
	pg/ml	228	182	274	
	pmol/l	1214	971	1457	Beckman Dxl800
	pg/ml	330	264	396	
	pmol/l	948	758	1138	Roche Cobas 6000/8000 (Estradiol II)
	pg/ml	258	206	310	
	pmol/l	952	762	1142	Roche Cobas 4000/E411 (Estradiol II)
	pg/ml	259	207	311	
	pmol/l	1234	740	1728	Siemens Centaur XP/XPT/Classic Enhanced (eE2)
	pg/ml	336	202	470	
	pmol/l	925	740	1110	Roche Cobas 6000/8000 (Estradiol III)
	pg/ml	252	201	303	
	pmol/l	934	747	1121	Roche Elecsys (Estradiol III)
	pg/ml	254	203	305	
	pmol/l	923	738	1108	Roche Cobas 4000/E411 (Estradiol III)
	pg/ml	251	201	301	
	pmol/l	1244	996	1493	Siemens Atellica IM
	pg/ml	338	271	406	
	pmol/l	785	628	942	Diasorin Liaison
	pg/ml	214	171	256	
	pmol/l	881	705	1057	Diasorin Liaison XL
	pg/ml	240	192	288	
Paracetamol	mmol/l	0.319	0.255	0.383	Roche Cobas 6000/8000
	mg/l	48.3	38.6	58.0	
	mmol/l	0.348	0.280	0.420	Gravimetric
	mg/l	52.6	42.4	63.5	
Phenobarbital	µmol/l	78.4	62.7	94.1	Abbott Architect
	µg/ml	18.2	14.5	21.9	
	µmol/l	75.9	60.7	91.1	Siemens Immulite 2000/2500
	µg/ml	17.6	14.1	21.1	
	µmol/l	76.7	61.4	92.0	Beckman AU400/600/640/2700/5400
	µg/ml	17.8	14.2	21.4	
	µmol/l	77.6	62.1	93.1	Gravimetric
	µg/ml	18.0	14.4	21.6	

IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 2091EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Phenytoin	μmol/l	66.5	53.2	79.8	Abbott Architect
	μg/ml	16.8	13.4	20.2	
	μmol/l	65.0	52.0	78.0	Roche Cobas 6000/8000
	μg/ml	16.4	13.1	19.7	
	μmol/l	71.3	57.0	85.6	Gravimetric
	μg/ml	18.0	14.4	21.6	
Primidone	μmol/l	22.5	18.0	27.0	Gravimetric
	μg/ml	4.92	3.93	5.89	
Progesterone	nmol/l	24.9	19.9	29.9	Siemens Immulite 1000
	ng/ml	7.79	6.23	9.35	
	nmol/l	43.2	34.6	51.8	BioMerieux Vidas
	ng/ml	13.5	10.8	16.2	
	nmol/l	38.0	30.4	45.6	Vitros ECI
	ng/ml	11.9	9.52	14.3	
	nmol/l	24.9	17.4	32.4	Siemens Centaur XP/XPT/Classic
	ng/ml	7.79	5.45	10.1	
	nmol/l	24.1	19.3	28.9	Siemens Immulite 2000/2500
	ng/ml	7.54	6.04	9.04	
	nmol/l	26.1	20.9	31.3	Abbott Architect
	ng/ml	8.17	6.54	9.80	
	nmol/l	34.8	27.8	41.8	Beckman Dxl Prog Cal 33555
	ng/ml	10.9	8.70	13.1	
	nmol/l	27.4	21.9	32.9	Diasorin Liaison
	ng/ml	8.58	6.85	10.3	
	nmol/l	33.9	27.1	40.7	Roche Cobas 4000/e411 (Prog. II)
	ng/ml	10.6	8.48	12.7	
	nmol/l	33.9	27.1	40.7	Roche Cobas 6000/8000 (Prog. II)
	ng/ml	10.6	8.48	12.7	
	nmol/l	26.7	21.4	32.0	Beckman Dxl Prog DE Cal A80773
	ng/ml	8.36	6.70	10.0	
	nmol/l	33.5	26.8	40.2	Roche Cobas 6000/8000 (Prog. III)
	ng/ml	10.5	8.39	12.6	
	nmol/l	34.0	27.2	40.8	Roche Cobas 4000/e411 (Prog. III)
	ng/ml	10.6	8.51	12.7	
	nmol/l	27.0	21.6	32.3	Siemens Atellica IM
	ng/ml	8.44	6.76	10.1	
	nmol/l	26.8	21.4	32.2	Diasorin Liaison XL
	ng/ml	8.39	6.70	10.1	
Prolactin	μU/ml	532	426	638	Beckman Access
	μU/ml	809	647	971	BioMerieux Vidas
	μU/ml	528	422	634	Siemens Immulite 1000
	μU/ml	524	419	629	Vitros ECI
	μU/ml	531	414	648	Siemens Centaur XP/XPT/Classic
	μU/ml	580	464	696	Siemens Immulite 2000/2500
	μU/ml	623	498	748	Abbott Architect

IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 2091EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Prolactin	µU/ml	655	524	786	Diasorin Liaison
	µU/ml	492	394	590	Beckman Dxl800
	µU/ml	601	481	721	Roche Elecsys/E170/Cobas 6000/8000 PRLII
	µU/ml	633	506	760	Roche Cobas E411
	µU/ml	596	477	715	Roche Cobas 6000/8000
	µU/ml	612	490	734	Abbott Architect restandardised
	µU/ml	494	396	593	Siemens Atellica IM
	µU/ml	626	501	751	Diasorin Liaison XL
PSA Free	ng/ml = µg/l	8.16	6.12	10.2	Siemens Immulite 2000/2500
	ng/ml = µg/l	10.2	7.65	12.8	Abbott Architect
	ng/ml = µg/l	10.4	7.80	13.0	Beckman Access standardised to Hybritech
	ng/ml = µg/l	8.05	6.04	10.1	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	5.28	3.96	6.60	Diasorin Liaison
	ng/ml = µg/l	9.52	7.14	11.9	Beckman DXI standardised to Hybritech
	ng/ml = µg/l	7.25	5.44	9.06	Roche Cobas E411
	ng/ml = µg/l	6.97	5.23	8.71	Roche Cobas 6000/8000
	ng/ml = µg/l	8.27	6.20	10.3	Siemens Atellica IM
	ng/ml = µg/l	5.43	4.07	6.79	Diasorin Liaison XL
PSA Total	ng/ml = µg/l	6.02	4.52	7.53	Siemens Immulite 1000 1st generation
	ng/ml = µg/l	12.7	9.53	15.9	Roche Elecsys
	ng/ml = µg/l	14.1	10.6	17.6	Beckman Access standardised to Hybritech
	ng/ml = µg/l	10.7	8.03	13.4	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	11.4	8.55	14.3	bioMerieux VIDAS TPSA
	ng/ml = µg/l	5.75	4.31	7.19	Siemens Immulite 2000/2500 1st generation
	ng/ml = µg/l	9.48	7.11	11.9	Abbott Architect
	ng/ml = µg/l	11.6	8.70	14.5	Vitros Eci
	ng/ml = µg/l	7.23	5.42	9.04	Diasorin Liaison
	ng/ml = µg/l	13.9	10.4	17.4	Beckman Access standardised to WHO IRP96/670
	ng/ml = µg/l	13.9	10.4	17.4	Beckman Dxl standardisd to Hybritech
	ng/ml = µg/l	11.2	8.40	14.0	Beckman Dxl800 standardised to WHO IRP96/670
	ng/ml = µg/l	13.7	10.3	17.1	Roche Cobas E411
	ng/ml = µg/l	13.1	9.83	16.4	Roche Cobas 6000/8000
	ng/ml = µg/l	12.3	9.23	15.4	SNIBE Maglumi Analysers
	ng/ml = µg/l	12.9	9.68	16.1	Ortho Vitros 3600/5600/ECi PSA II
	ng/ml = µg/l	10.3	7.73	12.9	Siemens Centaur CP
	ng/ml = µg/l	11.5	8.59	14.3	Siemens Atellica IM
	ng/ml = µg/l	7.05	5.29	8.81	Diasorin Liaison XL
Salicylate	mmol/l	1.22	0.980	1.46	Gravimetric
	mg/dl	16.8	13.5	20.1	
SHBG	nmol/l	37.7	30.2	45.2	Siemens Centaur XP/XPT/Classic
	nmol/l	34.1	27.3	40.9	Siemens Immulite 2000/2500
	nmol/l	33.5	26.8	40.2	Abbott Architect
	nmol/l	37.4	29.9	44.9	Roche Cobas E411
	nmol/l	36.0	28.8	43.2	Roche Cobas 6000/8000
	nmol/l	32.5	26.0	39.0	Beckman Dxl800
T Uptake	%U	36.9	30.3	43.5	Siemens Immulite 2000

IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 2091EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Testosterone	nmol/l	21.1	16.9	25.3	Vitros ECI
	ng/ml	6.08	4.87	7.29	
	ng/dl	608	487	729	
	nmol/l	14.3	10.0	18.6	Siemens Centaur XP/XPT/Classic
	ng/ml	4.12	2.88	5.36	
	ng/dl	412	288	536	
	nmol/l	17.8	14.2	21.4	Siemens Immulite 2000/2500
	ng/ml	5.13	4.09	6.17	
	ng/dl	513	409	617	
	nmol/l	15.6	12.5	18.7	Abbott Architect
	ng/ml	4.49	3.60	5.38	
	ng/dl	449	360	538	
	nmol/l	15.9	12.7	19.1	Beckman Access
	ng/ml	4.58	3.66	5.50	
	ng/dl	458	366	550	
	nmol/l	14.0	11.2	16.8	Beckman Dxl800
	ng/ml	4.03	3.23	4.83	
	ng/dl	403	323	483	
	nmol/l	17.5	14.0	21.0	Roche Elecsys Test II
	ng/ml	5.04	4.03	6.05	
	ng/dl	504	403	605	
	nmol/l	17.5	14.0	21.0	Roche Cobas 4000/e411 Test II
	ng/ml	5.04	4.03	6.05	
	ng/dl	504	403	605	
	nmol/l	17.5	14.0	21.0	Roche Cobas 6000 Test 2
	ng/ml	5.04	4.03	6.05	
	ng/dl	504	403	605	
	nmol/l	16.1	12.9	19.3	Abbott Architect 2nd Generation
	ng/ml	4.64	3.72	5.56	
	ng/dl	464	372	556	
	nmol/l	12.6	10.1	15.1	BioMerieux Vidas Testosterone II
	ng/ml	3.63	2.91	4.35	
	ng/dl	363	291	435	
	nmol/l	15.7	11.0	20.4	Siemens Centaur TST II
	ng/ml	4.52	3.16	5.88	
	ng/dl	452	316	588	
	nmol/l	15.2	12.1	18.2	Siemens Atellica IM
	ng/ml	4.37	3.48	5.24	
	ng/dl	437	348	524	
	nmol/l	9.77	7.82	11.7	Diasorin Liaison
	ng/ml	2.81	2.25	3.37	
	ng/dl	281	225	337	
	nmol/l	7.96	6.37	9.55	Diasorin Liaison XL
	ng/ml	2.29	1.83	2.75	
	ng/dl	229	183	275	
Theophylline	µmol/l	83.8	67.0	101	Gravimetric
	µg/ml	15.1	12.1	18.2	

IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 2091EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Thyroglobulin	ng/ml	16.9	12.7	21.1	Siemens Immulite 2000
	ng/ml	34.0	25.5	42.5	Roche Cobas 6000/8000
	ng/ml	33.6	25.2	42.0	Roche Cobas 6000 TGII
	ng/ml	32.5	24.4	40.6	Roche Cobas 4000/E411 TGII
	ng/ml	10.4	7.80	13.0	Diasorin Liaison
	ng/ml	12.4	9.30	15.5	Diasorin Liaison XL
Thyroid Stimulating Hormone	µU/ml = mIU/l	2.57	2.06	3.08	bioMerieux VIDAS TSH
	µU/ml = mIU/l	2.54	2.03	3.05	Siemens Immulite 1000
	µU/ml = mIU/l	2.77	2.22	3.32	Roche Elecsys
	µU/ml = mIU/l	2.46	1.97	2.95	Beckman Access hyperTSH 3rd Generation
	µU/ml = mIU/l	3.14	2.51	3.77	Vitros ECI
	µU/ml = mIU/l	2.72	1.85	3.59	Siemens Centaur XP/XPT/Classic
	µU/ml = mIU/l	2.74	2.19	3.29	Siemens Immulite 2000/2500
	µU/ml = mIU/l	2.32	1.86	2.78	Abbott Architect
	µU/ml = mIU/l	3.19	2.55	3.83	Diasorin Liaison
	µU/ml = mIU/l	2.35	1.88	2.82	Beckman Access Fast TSH
	µU/ml = mIU/l	2.75	2.20	3.30	Roche Cobas E411
	µU/ml = mIU/l	2.81	2.25	3.37	Roche Cobas 6000/8000
	µU/ml = mIU/l	2.46	1.97	2.95	Beckman Dxl800 Hyper TSH
	µU/ml = mIU/l	2.85	2.28	3.42	SNIBE Maglumi Analysers
	µU/ml = mIU/l	2.58	1.75	3.41	Siemens Centaur XP/XPT/Classic TSH3-Ultra
	µU/ml = mIU/l	2.43	1.94	2.92	Beckman Dxl 600/800 Access (3rd IS)
	µU/ml = mIU/l	2.54	2.03	3.05	Siemens Atellica IM
	µU/ml = mIU/l	3.50	2.80	4.20	Diasorin Liaison XL
Tobramycin	µmol/l	7.16	5.73	8.59	Gravimetric
	µg/ml	3.35	2.68	4.02	
Total Beta hCG	mU/ml=IU/l	33.1	26.5	39.7	BioMerieux Vidas
	IU/ml	0.033	0.027	0.039	
	mU/ml=IU/l	43.7	35.0	52.4	Siemens Immulite 1000
	IU/ml	0.044	0.035	0.053	
	mU/ml=IU/l	24.8	19.8	29.8	Beckman Access
	IU/ml	0.025	0.020	0.030	
	mU/ml=IU/l	38.6	30.9	46.3	Vitros ECI
	IU/ml	0.039	0.031	0.047	
	mU/ml=IU/l	25.4	15.2	35.6	Siemens Centaur XP/XPT/Classic
	IU/ml	0.025	0.015	0.036	
	mU/ml=IU/l	49.4	39.5	59.3	Siemens Immulite 2000
	IU/ml	0.049	0.040	0.058	
	mU/ml=IU/l	22.3	17.8	26.8	Abbott Architect
	IU/ml	0.022	0.018	0.026	
	mU/ml=IU/l	38.3	30.6	46.0	Siemens Dimension
	IU/ml	0.038	0.031	0.045	
	mU/ml=IU/l	24.4	19.5	29.3	Beckman Dxl800
	IU/ml	0.024	0.020	0.028	
	mU/ml=IU/l	20.2	16.2	24.2	Roche STAT (Intact)
	IU/ml	0.020	0.016	0.024	

IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 2091EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Total Beta hCG	mU/ml=IU/l	25.0	20.0	30.0	Roche hCG+Beta
	IU/ml	0.025	0.020	0.030	
	mU/ml=IU/l	26.7	21.4	32.0	SNIBE Maglumi Analysers
	IU/ml	0.027	0.021	0.033	
	mU/ml=IU/l	23.4	18.7	28.1	Radiometer AQT90 Flex
	IU/ml	0.023	0.019	0.027	
	mU/ml=IU/l	24.7	19.8	29.6	Beckman Access Total BhCG (5th IS)
	IU/ml	0.025	0.020	0.030	
	mU/ml=IU/l	24.9	19.9	29.9	Beckman Dxl Total BhCG (5th IS)
	IU/ml	0.025	0.020	0.030	
	mU/ml=IU/l	26.2	21.0	31.5	Siemens Atellica IM
	IU/ml	0.026	0.021	0.031	
	mU/ml=IU/l	24.0	19.2	28.8	Diasorin Liaison
	IU/ml	0.020	0.020	0.030	
	mU/ml=IU/l	22.6	18.1	27.1	Diasorin Liaison XL
	IU/ml	0.020	0.020	0.030	
Total T3	nmol/l	3.79	2.84	4.74	BioMerieux Vidas
	ng/ml	2.47	1.85	3.09	
	ng/dl	247	185	309	
	nmol/l	3.51	2.63	4.39	Siemens Immulite 1000
	ng/ml	2.29	1.71	2.87	
	ng/dl	229	171	287	
	nmol/l	3.19	2.39	3.99	Beckman Access
	ng/ml	2.08	1.56	2.60	
	ng/dl	208	156	260	
	nmol/l	4.10	3.08	5.12	Siemens Centaur XP/XPT/Classic
	ng/ml	2.67	2.00	3.34	
	ng/dl	267	200	334	
	nmol/l	3.26	2.45	4.08	Siemens Immulite 2000/2500
	ng/ml	2.12	1.59	2.65	
	ng/dl	212	159	265	
	nmol/l	3.20	2.40	4.00	Abbott Architect
	ng/ml	2.08	1.56	2.60	
	ng/dl	208	156	260	
	nmol/l	4.28	3.21	5.35	Vitros Eci
	ng/ml	2.79	2.09	3.49	
	ng/dl	279	209	349	
	nmol/l	2.86	2.15	3.58	Diasorin Liaison
	ng/ml	1.86	1.40	2.32	
	ng/dl	186	140	232	
	nmol/l	3.32	2.49	4.15	Beckman Dxl800
	ng/ml	2.16	1.62	2.70	
	ng/dl	216	162	270	
	nmol/l	4.12	3.09	5.15	Roche Cobas E411
	ng/ml	2.68	2.01	3.35	
	ng/dl	268	201	335	

IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 2091EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Total T3	nmol/l	3.88	2.91	4.85	Roche Cobas 6000/8000
	ng/ml	2.53	1.89	3.17	
	ng/dl	253	189	317	
	nmol/l	4.34	3.26	5.43	Siemens Atellica IM
	ng/ml	2.83	2.12	3.53	
	ng/dl	283	212	353	
	nmol/l	2.48	1.86	3.10	Diasorin Liaison XL
	ng/ml	1.61	1.21	2.02	
	ng/dl	161	121	202	
Total T4	nmol/l	135	101	169	Vitros ECI
	µg/dl	10.5	7.88	13.1	
	ng/ml	105	78.8	131	
	nmol/l	155	116	194	BioMerieux Vidas
	µg/dl	12.1	9.05	15.2	
	ng/ml	121	90.5	152	
	nmol/l	139	104	174	Beckman Access
	µg/dl	10.8	8.11	13.5	
	ng/ml	108	81.1	135	
	nmol/l	136	88.4	184	Siemens Centaur XP/XPT/Classic
	µg/dl	10.6	6.89	14.3	
	ng/ml	106	68.9	143	
	nmol/l	140	105	175	Siemens Immulite 2000/2500
	µg/dl	10.9	8.19	13.6	
	ng/ml	109	81.9	136	
	nmol/l	132	99.0	165	Abbott Architect
	µg/dl	10.3	7.72	12.9	
	ng/ml	103	77.2	129	
	nmol/l	107	80.3	134	Diasorin Liaison
	µg/dl	8.35	6.26	10.4	
	ng/ml	83.5	62.6	104	
	nmol/l	128	96.0	160	Roche Cobas E411
	µg/dl	9.98	7.49	12.5	
	ng/ml	100	74.9	125	
	nmol/l	125	93.8	156	Roche Cobas 6000/8000
	µg/dl	9.75	7.32	12.2	
	ng/ml	97.5	73.2	122	
Valproic Acid	µmol/l	548	438	658	Siemens Centaur XP/XPT/Classic
	µg/ml	79.1	63.2	95.0	
	µmol/l	503	402	604	Abbott Architect
	µg/ml	72.6	58.0	87.2	
	µmol/l	524	419	629	Roche Cobas 6000/8000
	µg/ml	75.6	60.5	90.7	
Vancomycin	µmol/l	638	510	765	Gravimetric
	µg/ml	92.0	73.6	110	
	µmol/l	7.42	5.94	8.90	Abbott Architect
	µg/ml	11.0	8.83	13.2	

IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 2091EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Vancomycin	μmol/l	6.89	5.51	8.27	Roche Cobas 6000/8000
	μg/ml	10.2	8.19	12.2	
	μmol/l	7.10	5.68	8.52	Gravimetric
	μg/ml	10.5	8.44	12.7	
Vitamin B12	pmol/l	421	337	505	Beckman Access
	pg/ml	570	457	683	
	pmol/l	499	374	624	Siemens Centaur XP/XPT/Classic
	pg/ml	676	507	845	
	pmol/l	449	359	539	Siemens Immulite 2000
	pg/ml	608	486	730	
	pmol/l	443	354	532	Abbott Architect
	pg/ml	600	480	720	
	pmol/l	449	359	539	Vitros ECI
	pg/ml	608	486	730	
	pmol/l	395	316	474	Beckman DxI800
	pg/ml	535	428	642	
	pmol/l	489	391	587	Roche Cobas E411
	pg/ml	663	530	796	
	pmol/l	487	390	584	Roche Cobas 6000/8000
	pg/ml	660	528	792	
	pmol/l	519	415	623	Siemens Atellica IM
	pg/ml	704	562	844	

IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

CAT. NO. IA2640
CAT. NO. IA2633
LOT NO. 2092EC

GTIN: 05055273203868
GTIN: 05055273203837
EXPIRY: 2022-11-28

SIZE: 12 x 5 ml
SIZE: 4 x 5 ml

INTENDED USE

This product is intended for *in vitro* diagnostic use, as assayed quality control material to monitor the accuracy and reproducibility of analytes listed in the package insert.

This device is for prescription use only.

SAFETY PRECAUTIONS AND WARNINGS

For *in vitro* diagnostic use only. Do not pipette by mouth. Exercise the normal precautions required for handling laboratory reagents.

Human source material, from which this product has been derived, has been tested at donor level for the Human Immunodeficiency Virus (HIV 1, HIV 2) antibody, Hepatitis B Surface Antigen (HbsAg), and Hepatitis C Virus (HCV) antibody and found to be NON-REACTIVE. FDA approved methods have been used to conduct these tests.

However, since no method can offer complete assurance as to the absence of infectious agents, this material and all patient samples should be handled as though capable of transmitting infectious diseases and disposed of accordingly.

The Abbott Architect CA19-9 assay utilises an antibody/antigen system based on the 1116-NA-19-9 antibody. There are reports that the formulation employed with this system may return elevated concentrations, when compared to other methods for samples expressing high levels of 1116-NA-19-9 reactive determinants.

Health and Safety Data Sheets are available on request.

STORAGE AND STABILITY

OPENED: Store refrigerated (+2°C to +8°C). Reconstituted serum is stable for 7 days at +2°C to +8°C, if kept capped in original container and free from contamination, or 4 weeks frozen once at -20°C. C-Peptide is stable for 1 day at +2°C to +8°C.

Thyroglobulin should be tested within 4 hours of reconstitution when stored at +2°C to +8°C, or within 2 weeks when stored at -20°C. ACTH should be tested immediately after the 30-minute reconstitution period. No frozen stability claim is made for ACTH, Aldosterone and C-Peptide. Only the required amount of product should be removed. After use, any residual product should NOT BE RETURNED to the original vial.

UNOPENED: Store refrigerated (+2°C to +8°C). Stable to expiration date printed on individual vials.

Bacterial contamination of the reconstituted serum will cause reductions in the stability of many components. If bacterial contamination is suspected, the vial should be discarded and a fresh vial reconstituted.

PREPARATION

Immunoassay Premium is supplied lyophilised.

1. Carefully reconstitute each vial of lyophilised serum with exactly 5 ml of distilled water at +15°C to +25°C. Close the bottle and allow to stand for 30 minutes before use. Ensure contents are completely dissolved by swirling gently. Avoid formation of foam. Do not shake.
2. Refer to the Control section of the individual analyser application.
3. Refrigerate any unused material. Prior to reuse, mix contents thoroughly.

MATERIALS PROVIDED

Immunoassay Premium - Level 3: 12 x 5 ml Tri-Level: 4 x 5 ml

MATERIAL REQUIRED BUT NOT PROVIDED

Volumetric pipette

VALUE ASSIGNMENT

Each batch of Immunoassay Premium is submitted to a number of external laboratories. Values are assigned from a consensus of results obtained by these laboratories, using a unique statistical analysis. Average values should normally fall within the listed ranges for analytes in the instruments specified in this product insert. However, variations may be caused by instrument reagents and laboratory technique. Therefore, the range produced herein should only be considered as a reference and it is recommended that each laboratory establish its own mean and acceptable ranges. Aldosterone is present in control levels 2 and level 3 only. Parathyroid Hormone (PTH) is present in the control, but no claim is made for the expected value or stability of this analyte.

If a method is unavailable, contact Randox Laboratories - Technical Services, Northern Ireland, tel: +44 (0) 28 9445 1070 or email Technical.Services@randox.com.



Randox Teoranta, Meenmore,
Dungloe, Donegal,
F94 TV06, Ireland

27 Apr '21 ne

IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 2092EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
17-OH-Progesterone	nmol/l	28.4	21.3	35.5	Immunotech RIA
	ng/ml	9.40	7.05	11.8	
25-OH Vitamin D	nmol/l	138	104	173	Siemens Centaur XP/XPT/Classic
	nmol/l	78.4	58.8	98.0	Roche Vitamin D Total
	nmol/l	88.3	66.2	110	Abbott Architect
	nmol/l	107	80.3	134	Vitros ECI
	nmol/l	82.8	62.1	104	BioMerieux Vidas
	nmol/l	85.6	64.2	107	Beckman Dxl 600/800
	nmol/l	102	76.5	128	Roche Vitamin D Total II
	nmol/l	109	81.8	136	Diasorin Liaison XL
	nmol/l	125	93.5	156	Siemens Atellica IM
	nmol/l	99.7	74.8	125	Diasorin Liaison
ACTH	pmol/l	35.1	26.3	43.9	Siemens Immulite 2000/2500
	pg/ml	160	120	200	
	pmol/l	24.2	18.2	30.3	Roche Cobas E411
	pg/ml	110	82.7	137	
	pmol/l	27.3	20.5	34.1	Roche Cobas 6000/8000
	pg/ml	124	93.2	155	
	pmol/l	34.2	25.7	42.8	Siemens Immulite 1000
	pg/ml	155	117	193	
Aldosterone	pmol/l	50.2	37.7	62.8	Diasorin Liaison XL
	pg/ml	228	171	285	
Alpha-fetoprotein	pmol/l	631	473	789	Diasorin Liaison XL
	pg/ml	228	171	285	
	KIU/l = IU/ml	210	168	252	BioMerieux Vidas
	ng/ml	254	203	305	
	KIU/l = IU/ml	199	159	239	Vitros ECI
	ng/ml	207	166	248	
	KIU/l = IU/ml	223	176	270	Siemens Centaur XP/XPT/Classic
	ng/ml	270	213	327	
	KIU/l = IU/ml	187	150	224	Siemens Immulite 2000/2500
	ng/ml	226	182	270	
	KIU/l = IU/ml	183	146	220	Abbott Architect
	ng/ml	221	177	265	
	KIU/l = IU/ml	174	139	209	Beckman Dxl800
	ng/ml	211	168	254	
	KIU/l = IU/ml	210	168	252	Roche Cobas 6000/8000
	ng/ml	254	203	305	
	KIU/l = IU/ml	209	167	251	Roche Cobas E411
	ng/ml	253	202	304	
	KIU/l = IU/ml	210	168	252	Siemens Atellica IM
	ng/ml	254	203	305	

IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 2092EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Alpha-fetoprotein	KIU/l = IU/ml	201	161	241	Diasorin Liaison
	ng/ml	243	195	292	
	KIU/l = IU/ml	209	167	251	Diasorin Liaison XL
	ng/ml	253	202	304	
Amikacin	µmol/l	24.1	19.3	28.9	Gravimetric
	µg/ml	14.1	11.3	16.9	
Androstenedione	nmol/l	34.0	25.5	42.5	Siemens Immulite 2000
	ng/ml	9.76	7.32	12.2	
	nmol/l	24.8	18.6	31.0	Diasorin Liaison XL
	ng/ml	7.12	5.34	8.90	
Beta-2-microglobulin	µg/ml = mg/l	6.27	5.02	7.52	Siemens Immulite 2000/2500
	µg/ml = mg/l	7.17	5.74	8.60	Abbott Architect
	µg/ml = mg/l	6.94	5.55	8.33	Roche Cobas 6000/8000
	µg/ml = mg/l	5.99	4.79	7.19	Diasorin Liaison XL
C-Peptide	nmol/l	3.390	2.540	4.240	Siemens Immulite 2000/2500
	ng/ml	10.2	7.67	12.7	
	nmol/l	3.240	2.430	4.050	Roche Cobas 6000/8000
	ng/ml	9.78	7.34	12.2	
	nmol/l	2.950	2.210	3.690	Abbott Architect
	ng/ml	8.91	6.67	11.2	
	nmol/l	3.400	2.550	4.250	Diasorin Liaison
	ng/ml	10.3	7.70	12.8	
Carbamazepine	µmol/l	68.4	42.4	94.4	Siemens Centaur XP/XPT/Classic
	µg/ml	16.2	10.0	22.4	
	µmol/l	69.0	55.2	82.8	Abbott Architect
	µg/ml	16.3	13.0	19.6	
	µmol/l	69.2	55.4	83.0	Roche Cobas 6000/8000
	µg/ml	16.4	13.1	19.7	
	µmol/l	72.2	57.8	86.6	Gravimetric
	µg/ml	17.1	13.7	20.5	
Carcinoembryonic Antigen (CEA)	ng/ml = µg/l	62.3	49.8	74.8	BioMerieux Vidas
	ng/ml = µg/l	82.0	65.6	98.4	Siemens Immulite 1000
	ng/ml = µg/l	63.1	50.5	75.7	Vitros ECI
	ng/ml = µg/l	64.1	51.3	76.9	Beckman Access
	ng/ml = µg/l	64.1	44.2	84.0	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	84.3	67.4	101	Siemens Immulite 2000/2500
	ng/ml = µg/l	72.1	57.7	86.5	Abbott Architect
	ng/ml = µg/l	58.2	46.6	69.9	Diasorin Liaison
	ng/ml = µg/l	57.9	46.3	69.5	Beckman DxI800
	ng/ml = µg/l	50.5	40.4	60.6	Roche Cobas 6000/8000
	ng/ml = µg/l	51.0	40.8	61.2	Roche Cobas E411
	ng/ml = µg/l	61.1	48.9	73.3	Siemens Atellica IM
	ng/ml = µg/l	60.3	48.2	72.3	Diasorin Liaison XL
Cortisol	nmol/l	913	685	1141	Siemens Immulite 1000
	µg/dl	32.9	24.7	41.1	

IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 2092EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Cortisol	nmol/l	1069	802	1336	Roche Elecsys
	µg/dl	38.5	28.9	48.1	
	nmol/l	1082	747	1417	Siemens Centaur XP/XPT/Classic
	µg/dl	39.0	26.9	51.1	
	nmol/l	877	658	1096	Siemens Immulite 2000/2500
	µg/dl	31.6	23.7	39.5	
	nmol/l	869	652	1086	Vitros ECI
	µg/dl	31.3	23.5	39.1	
	nmol/l	818	614	1023	Abbott Architect
	µg/dl	29.4	22.1	36.7	
	nmol/l	922	692	1153	Beckman Dxl800
	µg/dl	33.2	24.9	41.5	
	nmol/l	1105	829	1381	Roche Cobas 6000/8000
	µg/dl	39.8	29.8	49.8	
	nmol/l	1000	750	1250	Roche Cobas E411
	µg/dl	36.0	27.0	45.0	
	nmol/l	954	716	1193	Roche Cobas 4000/e411 Gen II
	µg/dl	34.3	25.8	42.8	
	nmol/l	906	680	1133	Roche Cobas 6000/8000 Gen II
	µg/dl	32.6	24.5	40.7	
DHEA-S	nmol/l	1171	878	1464	Siemens Atellica IM
	µg/dl	42.2	31.6	52.7	
	nmol/l	969	727	1211	Diasorin Liaison
	µg/dl	34.9	26.2	43.6	
	nmol/l	1131	848	1414	Diasorin Liaison XL
	µg/dl	40.7	30.5	50.9	
	µmol/l	17.6	14.1	21.1	Siemens Immulite 2000/2500
	µmol/l	26.2	21.0	31.4	Roche Elecsys
Digoxin	µmol/l	19.2	15.4	23.0	Abbott Architect
	µmol/l	15.9	9.54	22.3	Siemens Centaur XP/XPT/Classic
	µmol/l	24.9	19.9	29.9	Roche Cobas E411
	µmol/l	25.0	20.0	30.0	Roche Cobas 6000/8000
	µmol/l	16.7	13.3	20.0	Siemens Atellica IM
	µmol/l	18.3	14.6	21.9	Diasorin Liaison XL
	nmol/l	5.53	4.42	6.64	Siemens Immulite 2000/2500
	ng/ml	4.32	3.45	5.19	
Ethosuximide	nmol/l	4.39	3.51	5.27	Abbott Architect
	ng/ml	3.43	2.74	4.12	
	nmol/l	4.88	3.90	5.86	Beckman Dxl800
	ng/ml	3.81	3.05	4.57	
	nmol/l	4.98	3.98	5.98	Roche Cobas 6000/8000
	ng/ml	3.89	3.11	4.67	
	nmol/l	5.12	4.10	6.14	Gravimetric
	ng/ml	4.00	3.20	4.80	

IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 2092EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Ferritin	ng/ml = µg/l	281	225	337	BioMerieux Vidas
	ng/ml = µg/l	350	280	420	Roche Elecsys
	ng/ml = µg/l	237	190	284	Beckman Access
	ng/ml = µg/l	212	170	254	Vitros ECI
	ng/ml = µg/l	323	252	394	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	293	234	352	Siemens Immulite 2000/2500
	ng/ml = µg/l	375	300	450	Abbott Architect
	ng/ml = µg/l	339	271	407	Roche Modular E170
	ng/ml = µg/l	237	190	284	Beckman Dxl800
	ng/ml = µg/l	320	256	384	Siemens Atellica IM
	ng/ml = µg/l	346	277	415	Diasorin Liaison
	ng/ml = µg/l	341	273	409	Diasorin Liaison XL
Folate	nmol/l	23.5	17.9	29.1	Beckman Access
	ng/ml	10.4	7.89	12.9	
	nmol/l	17.4	13.2	21.6	Siemens Immulite 2000
	ng/ml	7.67	5.82	9.52	
	nmol/l	14.5	11.0	18.0	Vitros ECI
	ng/ml	6.39	4.85	7.93	
	nmol/l	20.2	15.4	25.0	Abbott Architect
	ng/ml	8.91	6.79	11.0	
	nmol/l	44.8	26.9	62.7	Siemens Centaur XP/XPT/Classic (enhanced kit)
	ng/ml	19.8	11.9	27.7	
	nmol/l	23.5	17.9	29.1	Beckman Dxl800
	ng/ml	10.4	7.89	12.9	
Free T3	nmol/l	23.8	18.1	29.5	Roche Cobas 6000/8000 Folate III
	ng/ml	10.5	7.98	13.0	
	nmol/l	37.4	28.4	46.4	Siemens Atellica IM
	ng/ml	16.5	12.5	20.5	
	pmol/l	29.8	22.4	37.3	Roche Elecsys
	ng/dl	1.94	1.46	2.42	
	pg/ml	19.4	14.6	24.2	
	pmol/l	19.3	14.5	24.1	Beckman Access
	ng/dl	1.25	0.943	1.56	
	pg/ml	12.6	9.44	15.8	
	pmol/l	35.0	26.3	43.8	Vitros ECI
	ng/dl	2.28	1.71	2.85	
	pg/ml	22.8	17.1	28.5	
	pmol/l	25.1	15.1	35.1	Siemens Centaur XP/XPT/Classic
	ng/dl	1.63	0.978	2.28	
	pg/ml	16.3	9.78	22.8	
	pmol/l	14.4	10.8	18.0	Siemens Immulite 2000/2500
	ng/dl	0.936	0.702	1.17	
	pg/ml	9.37	7.03	11.7	
	pmol/l	23.5	17.6	29.4	Abbott Architect
	ng/dl	1.53	1.14	1.92	
	pg/ml	15.3	11.5	19.1	

IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 2092EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Free T3	pmol/l	39.5	29.6	49.4	Diasorin Liaison
	ng/dl	2.57	1.92	3.22	
	pg/ml	25.7	19.3	32.1	
	pmol/l	18.6	14.0	23.3	Beckman Dxl800
	ng/dl	1.21	0.910	1.51	
	pg/ml	12.1	9.11	15.1	
	pmol/l	30.1	22.6	37.6	Roche Cobas E411
	ng/dl	1.96	1.47	2.45	
	pg/ml	19.6	14.7	24.5	
	pmol/l	30.5	22.9	38.1	Roche Cobas 6000/8000
	ng/dl	1.98	1.49	2.47	
	pg/ml	19.9	14.9	24.9	
	pmol/l	27.3	20.5	34.1	Siemens Atellica IM
	ng/dl	1.77	1.33	2.22	
	pg/ml	17.8	13.3	22.2	
	pmol/l	40.2	30.2	50.3	Diasorin Liaison XL
	ng/dl	2.61	1.96	3.27	
	pg/ml	26.2	19.7	32.7	
Free T4	pmol/l	77.1	57.8	96.4	Siemens Immulite 1000
	ng/dl	6.01	4.51	7.51	
	pg/ml	60.1	45.1	75.1	
	pmol/l	76.8	57.6	96.0	Roche Elecsys
	ng/dl	5.99	4.49	7.49	
	pg/ml	59.9	44.9	74.9	
	pmol/l	54.3	40.7	67.9	Beckman Access
	ng/dl	4.24	3.17	5.31	
	pg/ml	42.4	31.7	53.1	
	pmol/l	89.8	67.4	112	Vitros ECI
	ng/dl	7.00	5.26	8.74	
	pg/ml	70.0	52.6	87.4	
	pmol/l	54.6	41.0	68.3	Siemens Centaur XP/XPT/Classic
	ng/dl	4.26	3.20	5.32	
	pg/ml	42.6	32.0	53.2	
	pmol/l	76.8	57.6	96.0	Siemens Immulite 2000/2500
	ng/dl	5.99	4.49	7.49	
	pg/ml	59.9	44.9	74.9	
	pmol/l	49.8	37.4	62.3	Abbott Architect
	ng/dl	3.88	2.92	4.84	
	pg/ml	38.8	29.2	48.4	
	pmol/l	101	75.8	126	Diasorin Liaison
	ng/dl	7.88	5.91	9.85	
	pg/ml	78.8	59.1	98.5	
	pmol/l	59.4	44.6	74.3	Beckman Dxl800
	ng/dl	4.63	3.48	5.78	
	pg/ml	46.3	34.8	57.8	

IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 2092EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Free T4	pmol/l	76.8	57.6	96.0	Roche Cobas 6000/8000
	ng/dl	5.99	4.49	7.49	
	pg/ml	59.9	44.9	74.9	
	pmol/l	77.2	57.9	96.5	Roche Cobas E411
	ng/dl	6.02	4.52	7.52	
	pg/ml	60.2	45.2	75.2	
	pmol/l	83.9	62.9	105	Biomerieux Vidas FT4N Kit
	ng/dl	6.54	4.91	8.17	
	pg/ml	65.4	49.1	81.7	
	pmol/l	59.1	44.3	73.9	Siemens Centaur CP
	ng/dl	4.61	3.46	5.76	
	pg/ml	46.1	34.6	57.6	
	pmol/l	60.4	45.3	75.5	Siemens Atellica IM
	ng/dl	4.71	3.53	5.89	
	pg/ml	47.1	35.3	58.9	
	pmol/l	124	93.0	155	Diasorin Liaison XL
	ng/dl	9.67	7.25	12.1	
	pg/ml	96.7	72.5	121	
FSH	mU/ml	61.3	49.0	73.6	Siemens Immulite 1000
	mU/ml	78.4	62.7	94.1	BioMerieux Vidas
	mU/ml	61.9	49.5	74.3	Beckman Access
	mU/ml	56.8	45.4	68.2	Roche/BM Elecsys
	mU/ml	43.5	34.8	52.2	Vitros Eci
	mU/ml	80.0	62.4	97.6	Siemens Centaur XP/XPT/Classic
	mU/ml	59.5	47.6	71.4	Siemens Immulite 2000/2500
	mU/ml	51.4	41.1	61.7	Abbott Architect
	mU/ml	70.2	56.2	84.2	Diasorin Liaison
	mU/ml	62.5	50.0	75.0	Beckman Dxl800
	mU/ml	58.9	47.1	70.7	Roche Cobas E411
	mU/ml	55.6	44.5	66.7	Roche Cobas 6000/8000
	mU/ml	82.6	66.1	99.1	Siemens Atellica IM
	mU/ml	84.9	67.9	102	Diasorin Liaison XL
Gentamicin	µmol/l	11.7	9.38	14.1	Gravimetric
	µg/ml	5.60	4.48	6.74	
Growth Hormone (GH)	µU/ml	45.5	36.4	54.6	Siemens Immulite 1000
	ng/ml	15.2	12.1	18.3	Siemens Immulite 2000/2500
	µU/ml	49.3	39.4	59.2	
	ng/ml	16.4	13.1	19.7	Beckman Dxl800
	µU/ml	41.2	33.0	49.4	
	ng/ml	13.7	11.0	16.4	Diasorin Liaison
	µU/ml	45.9	36.7	55.1	
	ng/ml	15.3	12.2	18.4	Roche Cobas 6000/8000
	µU/ml	45.9	36.7	55.1	
	ng/ml	15.3	12.2	18.4	Diasorin Liaison XL
	µU/ml	44.6	35.7	53.5	
	ng/ml	14.9	11.9	17.8	

IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 2092EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Immunoglobulin E	KIU/l = IU/ml	509	407	611	Siemens Immulite 1000
	KIU/l = IU/ml	482	386	578	Pharmacia Unicap
	KIU/l = IU/ml	505	303	707	Siemens Centaur XP/XPT/Classic
	KIU/l = IU/ml	547	438	656	Siemens Immulite 2000/2500
	KIU/l = IU/ml	539	431	647	Abbott Architect
	KIU/l = IU/ml	541	433	649	Roche Cobas E411
	KIU/l = IU/ml	524	419	629	Roche Cobas 6000/8000
	KIU/l = IU/ml	522	417	626	Siemens Atellica IM
Insulin	mU/l	28.7	21.5	35.9	Siemens Centaur XP/XPT/Classic
	µU/ml	28.7	21.5	35.9	
	mU/l	25.3	19.0	31.6	Abbott Architect
	µU/ml	25.3	19.0	31.6	
	mU/l	33.1	24.8	41.4	Roche Cobas E411
	µU/ml	33.1	24.8	41.4	
	mU/l	32.3	24.2	40.4	Roche Cobas 6000/8000
	µU/ml	32.3	24.2	40.4	
	mU/l	25.5	19.1	31.9	Beckman Dxl 600/800
	µU/ml	25.5	19.1	31.9	
	mU/l	28.9	21.7	36.1	Siemens Atellica IM
	µU/ml	28.9	21.7	36.1	
	mU/l	34.8	26.1	43.5	Diasorin Liaison
	µU/ml	34.8	26.1	43.5	
	mU/l	39.8	29.9	49.8	Diasorin Liaison XL
	µU/ml	39.8	29.9	49.8	
Luteinising Hormone (LH)	mU/ml	35.7	28.6	42.8	Beckman Access
	mU/ml	50.9	40.7	61.1	BioMerieux Vidas
	mU/ml	76.3	61.0	91.6	Siemens Immulite 1000
	mU/ml	58.8	47.0	70.6	Vitros ECI
	mU/ml	50.1	38.6	61.6	Siemens Centaur XP/XPT/Classic
	mU/ml	69.2	55.4	83.0	Siemens Immulite 2000
	mU/ml	42.1	33.7	50.5	Abbott Architect
	mU/ml	65.2	52.2	78.2	Diasorin Liaison
	mU/ml	35.0	28.0	42.0	Beckman Dxl800
	mU/ml	53.8	43.0	64.6	Roche Cobas E411
	mU/ml	55.4	44.3	66.5	Roche Cobas 6000/8000
	mU/ml	50.9	40.7	61.1	Siemens Atellica IM
	mU/ml	70.5	56.4	84.6	Diasorin Liaison XL
Oestradiol	pmol/l	3181	2545	3817	BioMerieux Vidas
	pg/ml	865	692	1038	
	pmol/l	2657	2126	3188	Vitros ECI
	pg/ml	723	578	868	
	pmol/l	2646	2117	3175	Beckman Access
	pg/ml	720	576	864	
	pmol/l	2549	2039	3059	Siemens Immulite 2000/2500
	pg/ml	693	555	831	
	pmol/l	1477	1182	1772	Abbott Architect
	pg/ml	402	322	482	

IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 2092EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Oestradiol	pmol/l	2399	1919	2879	Beckman DxI800
	pg/ml	653	522	784	
	pmol/l	1749	1399	2099	Roche Cobas 6000/8000 (Estradiol II)
	pg/ml	476	381	571	
	pmol/l	1738	1390	2086	Roche Cobas 4000/E411 (Estradiol II)
	pg/ml	473	378	568	
	pmol/l	2835	1758	3912	Siemens Centaur XP/XPT/Classic Enhanced (eE2)
	pg/ml	771	478	1064	
	pmol/l	1744	1395	2093	Roche Cobas 6000/8000 (Estradiol III)
	pg/ml	474	379	569	
	pmol/l	1755	1404	2106	Roche Elecsys (Estradiol III)
	pg/ml	477	382	572	
	pmol/l	1727	1382	2072	Roche Cobas 4000/E411 (Estradiol III)
	pg/ml	470	376	564	
	pmol/l	2941	2353	3529	Siemens Atellica IM
	pg/ml	800	640	960	
Paracetamol	pmol/l	1546	1237	1855	Diasorin Liaison
	pg/ml	421	336	505	
	pmol/l	1431	1145	1717	Diasorin Liaison XL
	pg/ml	389	311	467	
Phenobarbital	mmol/l	0.484	0.387	0.581	Roche Cobas 6000/8000
	mg/l	73.2	58.6	87.8	
	mmol/l	0.529	0.420	0.630	Gravimetric
	mg/l	80.0	63.5	95.3	
Phenytoin	µmol/l	121	96.8	145	Abbott Architect
	µg/ml	28.1	22.5	33.7	
	µmol/l	120	96.0	144	Siemens Immulite 2000/2500
	µg/ml	27.8	22.3	33.3	
	µmol/l	122	97.6	146	Beckman AU400/600/640/2700/5400
	µg/ml	28.3	22.6	34.0	
Phenytoin	µmol/l	121	96.6	145	Gravimetric
	µg/ml	28.0	22.4	33.6	
Phenytoin	µmol/l	92.8	74.2	111	Abbott Architect
	µg/ml	23.4	18.7	28.1	
	µmol/l	88.3	70.6	106	Beckman DxC
	µg/ml	22.3	17.8	26.8	
	µmol/l	93.1	74.5	112	Roche Cobas 6000/8000
	µg/ml	23.5	18.8	28.2	
Primidone	µmol/l	99.8	79.8	120	Gravimetric
	µg/ml	25.2	20.1	30.3	
	µmol/l	32.7	26.2	39.2	Gravimetric
Progesterone	µg/ml	7.14	5.72	8.56	
	nmol/l	97.9	78.3	117	Beckman Access Prog Cal 33555
	ng/ml	30.6	24.5	36.7	
	nmol/l	77.2	61.8	92.6	Siemens Immulite 1000
Progesterone	ng/ml	24.2	19.3	29.1	

IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 2092EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Progesterone	nmol/l	160	128	192	BioMerieux Vidas
	ng/ml	50.1	40.1	60.1	
	nmol/l	109	87.2	131	Roche Elecsys (Prog. II)
	ng/ml	34.1	27.3	40.9	
	nmol/l	102	81.6	122	Vitros ECI
	ng/ml	31.9	25.5	38.3	
	nmol/l	71.9	51.0	92.8	Siemens Centaur XP/XPT/Classic
	ng/ml	22.5	16.0	29.0	
	nmol/l	61.7	49.4	74.0	Siemens Immulite 2000/2500
	ng/ml	19.3	15.5	23.1	
	nmol/l	90.3	72.2	108	Abbott Architect
	ng/ml	28.3	22.6	34.0	
	nmol/l	107	85.6	128	Beckman Dxl Prog Cal 33555
	ng/ml	33.5	26.8	40.2	
	nmol/l	83.6	66.9	100	Diasorin Liaison
	ng/ml	26.2	20.9	31.5	
	nmol/l	102	81.6	122	Roche Cobas 4000/e411 (Prog. II)
	ng/ml	31.9	25.5	38.3	
	nmol/l	103	82.4	124	Roche Cobas 6000/8000 (Prog. II)
	ng/ml	32.2	25.8	38.6	
	nmol/l	85.9	68.7	103	Beckman Dxl Prog DE Cal A80773
	ng/ml	26.9	21.5	32.3	
	nmol/l	100	80.0	120	Roche Cobas 6000/8000 (Prog. III)
	ng/ml	31.3	25.0	37.6	
	nmol/l	102	81.6	122	Roche Cobas 4000/e411 (Prog. III)
	ng/ml	31.9	25.5	38.3	
	nmol/l	80.6	64.5	96.7	Siemens Atellica IM
	ng/ml	25.2	20.2	30.3	
	nmol/l	89.1	71.3	107	Diasorin Liaison XL
	ng/ml	27.9	22.3	33.5	
Prolactin	µU/ml	870	696	1044	Beckman Access
	µU/ml	1399	1119	1679	BioMerieux Vidas
	µU/ml	1032	826	1238	Siemens Immulite 1000
	µU/ml	919	735	1103	Vitros ECI
	µU/ml	926	695	1157	Siemens Centaur XP/XPT/Classic
	µU/ml	936	749	1123	Siemens Immulite 2000/2500
	µU/ml	1083	866	1300	Abbott Architect
	µU/ml	1118	894	1342	Diasorin Liaison
	µU/ml	874	699	1049	Beckman Dxl800
	µU/ml	1033	826	1240	Roche Elecsys/E170/Cobas 6000/8000 PRLII
	µU/ml	1074	859	1289	Roche Cobas E411
	µU/ml	1022	818	1226	Roche Cobas 6000/8000
	µU/ml	1054	843	1265	Abbott Architect restandardised
	µU/ml	923	738	1107	Siemens Atellica IM
	µU/ml	1101	881	1321	Diasorin Liaison XL

IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 2092EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
PSA Free	ng/ml = µg/l	19.5	14.6	24.4	Siemens Immulite 2000/2500
	ng/ml = µg/l	25.3	19.0	31.6	Abbott Architect
	ng/ml = µg/l	18.6	14.0	23.3	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	12.2	9.15	15.3	Diasorin Liaison
	ng/ml = µg/l	25.2	18.9	31.5	Beckman DXI standardised to Hybritech
	ng/ml = µg/l	16.9	12.7	21.1	Roche Cobas E411
	ng/ml = µg/l	16.6	12.5	20.8	Roche Cobas 6000/8000
	ng/ml = µg/l	20.5	15.4	25.6	Siemens Atellica IM
	ng/ml = µg/l	11.8	8.85	14.8	Diasorin Liaison XL
PSA Total	ng/ml = µg/l	14.5	10.9	18.1	Siemens Immulite 1000 1st generation
	ng/ml = µg/l	29.0	21.8	36.3	Roche Elecsys
	ng/ml = µg/l	34.8	26.1	43.5	Beckman Access standardised to Hybritech
	ng/ml = µg/l	26.6	20.0	33.3	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	29.3	22.0	36.6	bioMerieux VIDAS TPSA
	ng/ml = µg/l	14.8	11.1	18.5	Siemens Immulite 2000/2500 1st generation
	ng/ml = µg/l	22.0	16.5	27.5	Abbott Architect
	ng/ml = µg/l	29.7	22.3	37.1	Vitros ECI
	ng/ml = µg/l	18.6	14.0	23.3	Diasorin Liaison
	ng/ml = µg/l	33.4	25.1	41.8	Beckman Dxl standardised to Hybritech
	ng/ml = µg/l	26.6	20.0	33.3	Beckman Dxl800 standardised to WHO IRP96/670
	ng/ml = µg/l	32.4	24.3	40.5	Roche Cobas E411
	ng/ml = µg/l	30.8	23.1	38.5	Roche Cobas 6000/8000
	ng/ml = µg/l	29.5	22.1	36.9	Ortho Vitros 3600/5600/ECi PSA II
	ng/ml = µg/l	27.7	20.8	34.6	Siemens Centaur CP
	ng/ml = µg/l	28.0	21.0	34.9	Siemens Atellica IM
	ng/ml = µg/l	17.7	13.3	22.1	Diasorin Liaison XL
Salicylate	mmol/l	2.88	2.30	3.46	Gravimetric
	mg/dl	39.7	31.7	47.7	
SHBG	nmol/l	35.8	28.6	43.0	Siemens Immulite 2000/2500
	nmol/l	32.0	25.6	38.4	Abbott Architect
	nmol/l	37.1	29.7	44.5	Roche Cobas E411
	nmol/l	35.9	28.7	43.1	Roche Cobas 6000/8000
	nmol/l	32.7	26.2	39.2	Beckman Dxl800
	nmol/l	34.5	27.6	41.3	Siemens Atellica IM
T Uptake	%U	41.4	33.9	48.9	Siemens Immulite 2000
Testosterone	nmol/l	46.8	37.4	56.2	Vitros ECI
	ng/ml	13.5	10.8	16.2	
	ng/dl	1348	1077	1619	
	nmol/l	25.2	18.4	32.0	Siemens Centaur XP/XPT/Classic
	ng/ml	7.26	5.30	9.22	
	ng/dl	726	530	922	
	nmol/l	37.2	29.8	44.6	Siemens Immulite 2000/2500
	ng/ml	10.7	8.58	12.8	
	ng/dl	1071	858	1284	
	nmol/l	30.2	24.2	36.2	Abbott Architect
	ng/ml	8.70	6.97	10.4	
	ng/dl	870	697	1043	

IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 2092EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Testosterone	nmol/l	28.7	23.0	34.4	Beckman Access
	ng/ml	8.27	6.62	9.92	
	ng/dl	827	662	992	
	nmol/l	25.1	20.1	30.1	Beckman Dxl800
	ng/ml	7.23	5.79	8.67	
	ng/dl	723	579	867	
	nmol/l	32.3	25.8	38.8	Roche Elecsys Test II
	ng/ml	9.30	7.43	11.2	
	ng/dl	930	743	1117	
	nmol/l	31.5	25.2	37.8	Roche Cobas 4000/e411 Test II
	ng/ml	9.07	7.26	10.9	
	ng/dl	907	726	1088	
	nmol/l	31.5	25.2	37.8	Roche Cobas 6000 Test 2
	ng/ml	9.07	7.26	10.9	
	ng/dl	907	726	1088	
	nmol/l	30.7	24.6	36.8	Abbott Architect 2nd Generation
	ng/ml	8.84	7.08	10.6	
	ng/dl	884	708	1060	
	nmol/l	28.1	22.5	33.7	BioMerieux Vidas Testosterone II
	ng/ml	8.09	6.48	9.70	
	ng/dl	809	648	970	
	nmol/l	25.9	18.9	32.9	Siemens Centaur TST II
	ng/ml	7.46	5.45	9.47	
	ng/dl	746	545	947	
	nmol/l	25.1	20.1	30.1	Siemens Atellica IM
	ng/ml	7.23	5.79	8.67	
	ng/dl	723	579	867	
	nmol/l	16.3	13.0	19.6	Diasorin Liaison
	ng/ml	4.69	3.74	5.64	
	ng/dl	469	374	564	
	nmol/l	13.3	10.6	16.0	Diasorin Liaison XL
	ng/ml	3.83	3.05	4.61	
	ng/dl	383	305	461	
Theophylline	μmol/l	158	126	190	Beckman DxC
	μg/ml	28.5	22.7	34.3	
	μmol/l	153	122	184	Roche Cobas 6000/8000
	μg/ml	27.6	22.0	33.2	
	μmol/l	166	133	200	Gravimetric
	μg/ml	30.0	24.0	36.0	
Thyroglobulin	ng/ml	36.5	27.4	45.6	Siemens Immulite 2000
	ng/ml	59.6	44.7	74.5	Beckman Access
	ng/ml	64.0	48.0	80.0	Roche Cobas E411
	ng/ml	62.6	47.0	78.3	Roche Cobas 6000/8000
	ng/ml	60.9	45.7	76.1	Roche Cobas 6000 TGII
	ng/ml	30.8	23.1	38.5	Diasorin Liaison XL

IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 2092EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Thyroid Stimulating Hormone	µU/ml = mIU/l	21.9	17.5	26.3	bioMerieux VIDAS TSH
	µU/ml = mIU/l	21.5	17.2	25.8	Siemens Immulite 1000
	µU/ml = mIU/l	22.6	18.1	27.1	Roche Elecsys
	µU/ml = mIU/l	21.4	17.1	25.7	Beckman Access hyperTSH 3rd Generation
	µU/ml = mIU/l	31.4	25.1	37.7	Vitros ECI
	µU/ml = mIU/l	24.5	16.7	32.3	Siemens Centaur XP/XPT/Classic
	µU/ml = mIU/l	22.7	18.2	27.2	Siemens Immulite 2000/2500
	µU/ml = mIU/l	19.4	15.5	23.3	Abbott Architect
	µU/ml = mIU/l	27.3	21.8	32.8	Diasorin Liaison
	µU/ml = mIU/l	22.0	17.6	26.4	Beckman Access Fast TSH
	µU/ml = mIU/l	22.6	18.1	27.1	Roche Cobas E411
	µU/ml = mIU/l	22.8	18.2	27.4	Roche Cobas 6000/8000
	µU/ml = mIU/l	21.0	16.8	25.2	Beckman Dxl800 Hyper TSH
	µU/ml = mIU/l	24.6	16.7	32.5	Siemens Centaur XP/XPT/Classic TSH3-Ultra
	µU/ml = mIU/l	20.7	16.6	24.8	Beckman Dxl 600/800 Access (3rd IS)
	µU/ml = mIU/l	22.9	18.3	27.5	Siemens Atellica IM
	µU/ml = mIU/l	29.2	23.4	35.0	Diasorin Liaison XL
Tobramycin	µmol/l	10.3	8.21	12.3	Gravimetric
	µg/ml	4.80	3.84	5.76	
Total Beta hCG	mU/ml=IU/l	541	433	649	BioMerieux Vidas
	IU/ml	0.541	0.433	0.649	
	mU/ml=IU/l	619	495	743	Siemens Immulite 1000
	IU/ml	0.619	0.495	0.743	
	mU/ml=IU/l	385	308	462	Roche Cobas Core EIA
	IU/ml	0.385	0.308	0.462	
	mU/ml=IU/l	335	268	402	Beckman Access
	IU/ml	0.335	0.268	0.402	
	mU/ml=IU/l	532	426	638	Vitros ECI
	IU/ml	0.532	0.426	0.638	
	mU/ml=IU/l	313	188	438	Siemens Centaur XP/XPT/Classic
	IU/ml	0.313	0.188	0.438	
	mU/ml=IU/l	611	489	733	Siemens Immulite 2000
	IU/ml	0.611	0.489	0.733	
	mU/ml=IU/l	328	262	394	Abbott Architect
	IU/ml	0.328	0.262	0.394	
	mU/ml=IU/l	557	446	668	Siemens Dimension
	IU/ml	0.557	0.446	0.668	
	mU/ml=IU/l	347	278	416	Beckman Dxl800
	IU/ml	0.347	0.278	0.416	
	mU/ml=IU/l	299	239	359	Roche STAT (Intact)
	IU/ml	0.299	0.239	0.359	
	mU/ml=IU/l	388	310	466	Roche hCG+Beta
	IU/ml	0.388	0.310	0.466	
	mU/ml=IU/l	330	264	396	Radiometer AQT90 Flex
	IU/ml	0.330	0.264	0.396	
	mU/ml=IU/l	340	272	408	Beckman Access Total BhCG (5th IS)
	IU/ml	0.340	0.272	0.408	

IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 2092EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Total Beta hCG	mU/ml=IU/l	349	279	419	Beckman Dxl Total BhCG (5th IS)
	IU/ml	0.349	0.279	0.419	
	mU/ml=IU/l	317	254	380	Siemens Atellica IM
	IU/ml	0.320	0.250	0.380	
	mU/ml=IU/l	289	231	347	Diasorin Liaison
	IU/ml	0.290	0.230	0.350	
Total T3	mU/ml=IU/l	333	266	400	Diasorin Liaison XL
	IU/ml	0.330	0.270	0.400	
	nmol/l	5.94	4.46	7.43	BioMerieux Vidas
	ng/ml	3.87	2.90	4.84	
	ng/dl	387	290	484	
	nmol/l	5.44	4.08	6.80	Beckman Access
	ng/ml	3.54	2.66	4.42	
	ng/dl	354	266	442	
	nmol/l	7.52	5.64	9.40	Siemens Centaur XP/XPT/Classic
	ng/ml	4.90	3.67	6.13	
	ng/dl	490	367	613	
	nmol/l	6.46	4.85	8.08	Siemens Immulite 2000/2500
	ng/ml	4.21	3.16	5.26	
	ng/dl	421	316	526	
	nmol/l	5.22	3.92	6.53	Abbott Architect
	ng/ml	3.40	2.55	4.25	
	ng/dl	340	255	425	
	nmol/l	7.84	5.88	9.80	Vitros ECi
	ng/ml	5.10	3.83	6.37	
	ng/dl	510	383	637	
	nmol/l	5.75	4.31	7.19	Diasorin Liaison
	ng/ml	3.74	2.81	4.67	
	ng/dl	374	281	467	
	nmol/l	6.68	5.01	8.35	Roche Cobas E411
	ng/ml	4.35	3.26	5.44	
	ng/dl	435	326	544	
	nmol/l	6.54	4.91	8.18	Roche Cobas 6000/8000
	ng/ml	4.26	3.20	5.32	
	ng/dl	426	320	532	
	nmol/l	4.69	3.52	5.86	Diasorin Liaison XL
	ng/ml	3.05	2.29	3.81	
	ng/dl	305	229	381	
Total T4	nmol/l	209	157	261	Vitros ECi
	µg/dl	16.3	12.2	20.4	
	ng/ml	163	122	204	
	nmol/l	238	179	298	BioMerieux Vidas
	µg/dl	18.6	14.0	23.2	
	ng/ml	186	140	232	
	nmol/l	204	153	255	Siemens Immulite 1000
	µg/dl	15.9	11.9	19.9	
	ng/ml	159	119	199	

IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 2092EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Total T4	nmol/l	210	147	273	Siemens Centaur XP/XPT/Classic
	µg/dl	16.4	11.5	21.3	
	ng/ml	164	115	213	
	nmol/l	198	149	248	Siemens Immulite 2000/2500
	µg/dl	15.4	11.6	19.2	
	ng/ml	154	116	192	
	nmol/l	194	146	243	Abbott Architect
	µg/dl	15.1	11.4	18.8	
	ng/ml	151	114	188	
	nmol/l	176	132	220	Diasorin Liaison
	µg/dl	13.7	10.3	17.1	
	ng/ml	137	103	171	
	nmol/l	218	164	273	Beckman Dxl800
	µg/dl	17.0	12.8	21.2	
	ng/ml	170	128	212	
	nmol/l	184	138	230	Roche Cobas E411
	µg/dl	14.4	10.8	18.0	
	ng/ml	144	108	180	
	nmol/l	174	131	218	Roche Cobas 6000/8000
	µg/dl	13.6	10.2	17.0	
	ng/ml	136	102	170	
	nmol/l	175	131	219	Diasorin Liaison XL
	µg/dl	13.7	10.2	17.1	
	ng/ml	137	102	171	
Valproic Acid	µmol/l	960	768	1152	Siemens Immulite 2000/2500
	µg/ml	139	111	167	
	µmol/l	955	764	1146	Siemens Centaur XP/XPT/Classic
	µg/ml	138	110	166	
	µmol/l	893	714	1072	Abbott Architect
	µg/ml	129	103	155	
	µmol/l	952	762	1142	Roche Cobas 6000/8000
	µg/ml	137	110	164	
	µmol/l	1116	893	1339	Gravimetric
	µg/ml	161	129	193	
	µmol/l	915	732	1098	Siemens Atellica IM
	µg/ml	132	106	158	
Vancomycin	µmol/l	10.8	8.64	13.0	Abbott Architect
	µg/ml	16.0	12.8	19.2	
	µmol/l	9.54	7.63	11.4	Roche Cobas 6000/8000
	µg/ml	14.2	11.3	17.1	
	µmol/l	10.2	8.16	12.2	Beckman DxC
	µg/ml	15.2	12.1	18.3	
	µmol/l	10.8	8.62	12.9	Gravimetric
	µg/ml	16.0	12.8	19.2	

IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 2092EC Size: 12 x 5ml / 4 x 5ml Expiry: 2022-11-28

Range					
Analyte	unit	Target	low	high	methods
Vitamin B12	pmol/l	739	591	887	Beckman Access
	pg/ml	1001	801	1201	
	pmol/l	842	632	1052	Siemens Centaur XP/XPT/Classic
	pg/ml	1141	856	1426	
	pmol/l	642	514	770	Siemens Immulite 2000
	pg/ml	870	696	1044	
	pmol/l	768	614	922	Abbott Architect
	pg/ml	1041	832	1250	
	pmol/l	654	523	785	Vitros ECI
	pg/ml	886	709	1063	
	pmol/l	739	591	887	Beckman Dxl800
	pg/ml	1001	801	1201	
	pmol/l	905	724	1086	Siemens Atellica IM
	pg/ml	1226	981	1472	