

## IMMUNOASSAY PREMIUM - LEVEL I (IA PREMIUM I)

<b>CAT. NO.</b> IA2638	<b>GTIN:</b> 05055273203844	<b>SIZE:</b> 12 x 5 ml
<b>CAT. NO.</b> IA2633	<b>GTIN:</b> 05055273203837	<b>SIZE:</b> 4 x 5 ml
<b>LOT NO.</b> 1816EC	<b>EXPIRY:</b> 2021-05-28	

### 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.

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.

- 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.
- Refer to the Control section of the individual analyser application.
- 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](mailto:Technical.Services@randox.com).

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## IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 1816EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods	
			low	high		
17-OH-Progesterone	nmol/l	2.64	1.98	3.30	Immunotech RIA	
	ng/ml	0.874	0.655	1.09		
	nmol/l	3.46	2.60	4.33	DRG ELISA	
	ng/ml	1.15	0.861	1.44		
	nmol/l	4.43	3.32	5.54	DIAsource RIA	
	ng/ml	1.47	1.10	1.84		
	nmol/l	3.67	2.75	4.59	SNIBE Maglumi Analysers	
	ng/ml	1.21	0.910	1.51		
	25-OH Vitamin D	nmol/l	31.7	23.8	39.6	Diasorin Liaison
		nmol/l	16.2	12.2	20.3	Roche Vitamin D Total
		nmol/l	15.0	11.3	18.8	Abbott Architect
		nmol/l	63.7	47.8	79.6	SNIBE Maglumi Analysers
nmol/l		57.5	43.1	71.9	Vitros ECi	
nmol/l		24.7	18.5	30.9	Tosoh Series	
nmol/l		21.4	16.1	26.8	BioMerieux Vidas	
nmol/l		34.7	26.0	43.4	Beckman Dxl 600/800	
nmol/l		11.4	8.55	14.3	Fujirebio Lumipulse G Series	
nmol/l		33.4	25.1	41.8	Beckman Access 25 OH Vitamin D Total	
ACTH	pmol/l	1.13	0.848	1.41	Siemens Immulite 2000/2500	
	pg/ml	5.14	3.85	6.43		
	pmol/l	2.13	1.60	2.66	Roche Cobas E411	
	pg/ml	9.68	7.27	12.1		
	pmol/l	2.02	1.52	2.53	Roche Cobas 6000/8000	
	pg/ml	9.18	6.91	11.5		
	Alpha-fetoprotein	KIU/l = IU/ml	8.71	6.97	10.5	Abbott Architect
		ng/ml	10.5	8.43	12.6	
KIU/l = IU/ml		8.07	6.46	9.68	BioMerieux Vidas	
ng/ml		9.76	7.82	11.7		
KIU/l = IU/ml		9.90	7.82	12.0	Siemens Centaur XP/XPT/Classic	
ng/ml		12.0	9.48	14.5		
KIU/l = IU/ml		8.33	6.66	10.0	Siemens Immulite 2000/2500	
ng/ml		10.1	8.06	12.1		
KIU/l = IU/ml		8.43	6.74	10.1	Siemens Immulite 1000	
ng/ml		10.2	8.16	12.2		
KIU/l = IU/ml		9.46	7.57	11.4	Beckman Dxl800	
ng/ml		11.4	9.16	13.6		
KIU/l = IU/ml		9.60	7.68	11.5	Roche Elecsys	
ng/ml		11.6	9.29	13.9		
KIU/l = IU/ml	11.0	8.80	13.2	Diasorin Liaison		
ng/ml	13.3	10.6	16.0			
KIU/l = IU/ml	9.81	7.85	11.8	Roche Modular E170		
ng/ml	11.9	9.50	14.3			

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Analyte	unit	Target	Range		methods
			low	high	
Alpha-fetoprotein	KIU/l = IU/ml	9.63	7.70	11.6	Beckman Access
	ng/ml	11.7	9.32	14.1	
	KIU/l = IU/ml	9.87	7.90	11.8	Tosoh Series
	ng/ml	11.9	9.56	14.2	
	KIU/l = IU/ml	10.2	8.16	12.2	Vitros ECI
	ng/ml	12.3	9.87	14.7	
	KIU/l = IU/ml	9.82	7.86	11.8	Roche Cobas 6000/8000
	ng/ml	11.9	9.51	14.3	
	KIU/l = IU/ml	15.3	12.2	18.4	CIS IRMA
	ng/ml	18.5	14.8	22.2	
	KIU/l = IU/ml	9.70	7.76	11.6	Roche Cobas E411
	ng/ml	11.7	9.39	14.0	
KIU/l = IU/ml	10.2	8.16	12.2	SNIBE Maglumi Analysers	
ng/ml	12.3	9.87	14.7		
KIU/l = IU/ml	9.37	7.50	11.2	Fujirebio Lumipulse G Series	
ng/ml	11.3	9.08	13.5		
KIU/l = IU/ml	10.4	8.32	12.5	Siemens Dimension	
ng/ml	12.6	10.1	15.1		
KIU/l = IU/ml	9.61	7.59	11.6	Siemens Centaur CP	
ng/ml	11.6	9.16	14.0		
Amikacin	µmol/l	6.49	5.19	7.79	Roche Integra
	µg/ml	3.80	3.04	4.56	
	µmol/l	6.45	5.16	7.74	Roche Cobas 6000/8000
	µg/ml	3.78	3.02	4.54	
µmol/l	6.40	5.12	7.68	Gravimetric	
µg/ml	3.75	3.00	4.50		
Androstenedione	nmol/l	4.34	3.26	5.43	Siemens Immulite 2000
	ng/ml	1.25	0.936	1.56	
Beta-2-microglobulin	µg/ml = mg/l	1.04	0.832	1.25	Abbott Architect
	µg/ml = mg/l	1.13	0.904	1.36	BioMerieux Vidas
	µg/ml = mg/l	1.02	0.816	1.22	Behring Nephelometer
	µg/ml = mg/l	1.07	0.856	1.28	Siemens Immulite 2000/2500
	µg/ml = mg/l	1.11	0.888	1.33	Siemens Immulite 1000
	µg/ml = mg/l	0.856	0.685	1.03	Diasorin Liaison
	µg/ml = mg/l	1.22	0.976	1.46	Tosoh Series
	µg/ml = mg/l	1.09	0.872	1.31	Roche Cobas E411
	µg/ml = mg/l	1.17	0.936	1.40	Roche Cobas 6000/8000
	µg/ml = mg/l	1.06	0.848	1.27	Siemens Dimension
	µg/ml = mg/l	0.698	0.558	0.838	SNIBE Maglumi Analysers
	µg/ml = mg/l	0.976	0.781	1.17	Fujirebio Lumipulse G Series
C-Peptide	nmol/l	0.275	0.206	0.344	Siemens Immulite 2000/2500
	ng/ml	0.830	0.622	1.04	
	nmol/l	0.433	0.325	0.541	Roche Elecsys
	ng/ml	1.31	0.981	1.64	
nmol/l	0.434	0.326	0.543	Roche Cobas 6000/8000	
ng/ml	1.31	0.984	1.64		

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Analyte	unit	Target	Range		methods	
			low	high		
C-Peptide	nmol/l	0.250	0.188	0.313	Siemens Immulite 1000	
	ng/ml	0.755	0.568	0.942		
	nmol/l	0.405	0.304	0.506	Diasorin Liaison	
	ng/ml	1.22	0.918	1.52		
	nmol/l	0.431	0.323	0.539	Roche Cobas E411	
	ng/ml	1.30	0.975	1.63		
	nmol/l	0.332	0.249	0.415	Abbott Architect	
	ng/ml	1.00	0.752	1.25		
	nmol/l	0.262	0.183	0.341	Siemens Centaur XP/XPT/Classic	
	ng/ml	0.791	0.554	1.03		
	nmol/l	0.577	0.433	0.721	SNIBE Maglumi Analysers	
	ng/ml	1.74	1.31	2.17		
	Carbamazepine	µmol/l	15.8	12.6	19.0	Abbott Architect
		µg/ml	3.74	2.98	4.50	
µmol/l		16.9	12.2	21.6	Siemens Centaur XP/XPT/Classic	
µg/ml		4.00	2.88	5.12		
µmol/l		14.3	11.4	17.2	Siemens Dimension	
µg/ml		3.38	2.69	4.07		
µmol/l		12.5	10.0	15.0	Siemens Immulite 2000/2500	
µg/ml		2.96	2.36	3.56		
µmol/l		11.9	9.52	14.3	Siemens Immulite 1000	
µg/ml		2.81	2.25	3.37		
µmol/l		15.4	12.3	18.5	Roche Integra	
µg/ml		3.64	2.91	4.37		
µmol/l		12.7	10.2	15.2	Vitros	
µg/ml		3.00	2.41	3.59		
µmol/l		14.7	11.8	17.6	Roche Cobas E411	
µg/ml		3.48	2.79	4.17		
µmol/l		14.0	11.2	16.8	Roche Cobas 6000/8000	
µg/ml		3.31	2.65	3.97		
µmol/l		13.9	11.1	16.7	Beckman DxC	
µg/ml		3.29	2.62	3.96		
µmol/l	16.6	13.3	19.9	Beckman AU400/600/640/2700/5400		
µg/ml	3.92	3.14	4.70			
µmol/l	15.6	12.5	18.7	Siemens ADVIA 1200/1650/1800/2400		
µg/ml	3.69	2.96	4.42			
µmol/l	15.4	12.3	18.5	Gravimetric		
µg/ml	3.64	2.91	4.37			
Carcinoembryonic Antigen (CEA)	ng/ml = µg/l	2.74	2.19	3.29	BioMerieux Vidas	
	ng/ml = µg/l	2.89	2.31	3.47	Roche Cobas 6000/8000	
	ng/ml = µg/l	3.06	2.45	3.67	Roche Cobas E411	
Cortisol	nmol/l	177	133	221	Abbott Architect	
	µg/dl	6.37	4.79	7.95		
	nmol/l	103	77.3	129	BioMerieux Vidas	
	µg/dl	3.71	2.78	4.64		
	nmol/l	163	108	218	Siemens Centaur XP/XPT/Classic	
	µg/dl	5.87	3.87	7.87		

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Cat. No. IA2638 / IA2633 Lot No. 1816EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Cortisol	nmol/l	135	101	169	CIS RIA
	µg/dl	4.86	3.64	6.08	
	nmol/l	175	131	219	Siemens Immulite 2000/2500
	µg/dl	6.30	4.72	7.88	
	nmol/l	165	124	206	Siemens Immulite 1000
	µg/dl	5.94	4.46	7.42	
	nmol/l	170	128	213	Beckman Dxl800
	µg/dl	6.12	4.61	7.63	
	nmol/l	157	118	196	Roche Elecsys
	µg/dl	5.65	4.25	7.05	
	nmol/l	195	146	244	Diasorin Liaison
	µg/dl	7.02	5.26	8.78	
	nmol/l	152	114	190	Roche Modular E170
	µg/dl	5.47	4.10	6.84	
	nmol/l	176	132	220	Beckman Access
	µg/dl	6.34	4.75	7.93	
	nmol/l	159	119	199	Tosoh Series
	µg/dl	5.72	4.28	7.16	
	nmol/l	130	97.5	163	Vitros Eci
	µg/dl	4.68	3.51	5.85	
nmol/l	153	115	191	Roche Cobas 6000/8000	
µg/dl	5.51	4.14	6.88		
nmol/l	162	122	203	Roche Cobas E411	
µg/dl	5.83	4.39	7.27		
nmol/l	238	179	298	SNIBE Maglumi Analysers	
µg/dl	8.57	6.44	10.7		
nmol/l	183	121	245	Siemens Centaur CP	
µg/dl	6.59	4.35	8.83		
nmol/l	157	118	196	Roche Modular E170 Gen II	
µg/dl	5.65	4.25	7.05		
nmol/l	162	122	203	Roche Cobas 4000/e411 Gen II	
µg/dl	5.83	4.39	7.27		
nmol/l	152	114	190	Roche Cobas 6000/8000 Gen II	
µg/dl	5.47	4.10	6.84		
nmol/l	168	126	210	Roche Elecsys Gen II	
µg/dl	6.05	4.54	7.56		
DHEA-S	µmol/l	2.21	1.77	2.65	Abbott Architect
	µmol/l	1.72	1.38	2.06	Siemens Immulite 2000/2500
	µmol/l	1.73	1.38	2.08	Siemens Immulite 1000
	µmol/l	2.12	1.70	2.54	Beckman Dxl800
	µmol/l	2.91	2.33	3.49	Roche Elecsys
	µmol/l	2.91	2.33	3.49	Roche Modular E170
	µmol/l	2.44	1.95	2.93	Beckman Access
	µmol/l	1.57	1.26	1.88	Diasorin Liaison
	µmol/l	1.51	0.982	2.04	Siemens Centaur XP/XPT/Classic

## IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 1816EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
DHEA-S	µmol/l	2.78	2.22	3.34	Roche Cobas E411
	µmol/l	2.79	2.23	3.35	Roche Cobas 6000/8000
	µmol/l	2.23	1.78	2.68	SNIBE Maglumi Analysers
Digoxin	nmol/l	0.680	0.544	0.816	Abbott Architect
	ng/ml	0.531	0.425	0.637	
	nmol/l	0.718	0.574	0.862	BioMerieux Vidas
	ng/ml	0.561	0.448	0.674	
	nmol/l	1.07	0.803	1.34	Siemens Centaur XP/XPT/Classic
	ng/ml	0.836	0.627	1.05	
	nmol/l	0.758	0.606	0.910	Siemens Dimension
	ng/ml	0.592	0.473	0.711	
	nmol/l	0.796	0.637	0.955	Siemens Immulite 2000/2500
	ng/ml	0.622	0.497	0.747	
	nmol/l	0.868	0.694	1.04	Beckman Dxl800
	ng/ml	0.678	0.542	0.814	
	nmol/l	0.891	0.713	1.07	Roche Integra
	ng/ml	0.696	0.557	0.835	
	nmol/l	0.938	0.750	1.13	Roche Cobas 6000/8000
	ng/ml	0.733	0.586	0.880	
	nmol/l	0.808	0.646	0.970	Beckman DxC
	ng/ml	0.631	0.505	0.757	
	nmol/l	1.00	0.800	1.20	Beckman AU400/600/640/2700/5400
	ng/ml	0.781	0.625	0.937	
Ethosuximide	µmol/l	226	181	271	Gravimetric
	µg/ml	32.0	25.7	38.4	
Ferritin	ng/ml = µg/l	14.1	11.3	16.9	Abbott Architect
	ng/ml = µg/l	10.7	8.56	12.8	BioMerieux Vidas
	ng/ml = µg/l	12.3	9.23	15.4	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	12.2	9.76	14.6	Siemens Immulite 2000/2500
	ng/ml = µg/l	12.6	10.1	15.1	Siemens Immulite 1000
	ng/ml = µg/l	9.26	7.41	11.1	Beckman Dxl800
	ng/ml = µg/l	14.2	11.4	17.0	Roche Elecsys
	ng/ml = µg/l	11.8	9.44	14.2	Diasorin Liaison
	ng/ml = µg/l	14.1	11.3	16.9	Roche Modular E170
	ng/ml = µg/l	8.94	7.15	10.7	Beckman Access
	ng/ml = µg/l	8.48	6.78	10.2	Tosoh Series
	ng/ml = µg/l	10.5	8.40	12.6	Vitros ECi
	ng/ml = µg/l	13.2	10.6	15.8	Immunotech IRMA

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Range					
Analyte	unit	Target	low	high	methods
Ferritin	ng/ml = µg/l	14.3	11.4	17.2	Roche Cobas E411
	ng/ml = µg/l	8.63	6.90	10.4	SNIBE Maglumi Analysers
	ng/ml = µg/l	6.40	5.12	7.68	Fujirebio Lumipulse G Series
	ng/ml = µg/l	10.5	7.88	13.1	Siemens Centaur CP
Folate	nmol/l	4.25	3.23	5.27	Abbott Architect
	ng/ml	1.87	1.42	2.32	
	nmol/l	9.11	5.01	13.2	Siemens Centaur XP/XPT/Classic (enhanced kit)
	ng/ml	4.02	2.21	5.83	
	nmol/l	3.17	2.41	3.93	Siemens Immulite 2000
	ng/ml	1.40	1.06	1.74	
	nmol/l	3.80	2.89	4.71	Beckman Dxl800
	ng/ml	1.68	1.27	2.09	
	nmol/l	4.14	3.15	5.13	Beckman Access
	ng/ml	1.83	1.39	2.27	
	nmol/l	7.03	5.34	8.72	Tosoh Series
	ng/ml	3.10	2.35	3.85	
	nmol/l	4.55	3.46	5.64	Vitros ECI
	ng/ml	2.01	1.53	2.49	
	nmol/l	2.51	1.91	3.11	MP Biomedicals RIA
	ng/ml	1.11	0.842	1.38	
	nmol/l	3.61	2.74	4.48	Roche Cobas 6000/8000
	ng/ml	1.59	1.21	1.97	
	nmol/l	2.81	2.14	3.48	SNIBE Maglumi Analysers
	ng/ml	1.24	0.944	1.54	
nmol/l	9.82	5.40	14.2	Siemens Centaur CP (enhanced kit)	
ng/ml	4.33	2.38	6.28		
nmol/l	3.58	2.72	4.44	Roche Cobas 6000/8000 Folate III	
ng/ml	1.58	1.20	1.96		
Free T3	pmol/l	2.45	1.84	3.06	Abbott Architect
	ng/dl	0.159	0.120	0.198	
	pg/ml	1.59	1.20	1.98	
	pmol/l	2.28	1.71	2.85	BioMerieux Vidas
	ng/dl	0.148	0.111	0.185	
	pg/ml	1.48	1.11	1.85	
	pmol/l	2.80	1.68	3.92	Siemens Centaur XP/XPT/Classic
	ng/dl	0.182	0.109	0.255	
	pg/ml	1.82	1.09	2.55	
	pmol/l	2.64	1.98	3.30	Siemens Immulite 2000/2500
	ng/dl	0.172	0.129	0.215	
	pg/ml	1.72	1.29	2.15	
	pmol/l	2.69	2.02	3.36	Siemens Immulite 1000
	ng/dl	0.175	0.131	0.219	
	pg/ml	1.75	1.32	2.18	
	pmol/l	3.07	2.30	3.84	Beckman Dxl800
ng/dl	0.200	0.150	0.250		
pg/ml	2.00	1.50	2.50		

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Range					
Analyte	unit	Target	low	high	methods
Free T3	pmol/l	3.43	2.57	4.29	Roche Elecsys
	ng/dl	0.223	0.167	0.279	
	pg/ml	2.23	1.67	2.79	
	pmol/l	2.29	1.72	2.86	Diasorin Liaison
	ng/dl	0.149	0.112	0.186	
	pg/ml	1.49	1.12	1.86	
	pmol/l	3.28	2.46	4.10	Roche Modular E170
	ng/dl	0.213	0.160	0.266	
	pg/ml	2.14	1.60	2.68	
	pmol/l	3.13	2.35	3.91	Beckman Access
	ng/dl	0.203	0.153	0.253	
	pg/ml	2.04	1.53	2.55	
	pmol/l	2.92	2.19	3.65	Tosoh Series
	ng/dl	0.190	0.142	0.238	
	pg/ml	1.90	1.43	2.37	
	pmol/l	6.21	4.66	7.76	Vitros ECi
	ng/dl	0.404	0.303	0.505	
	pg/ml	4.04	3.03	5.05	
	pmol/l	3.53	2.65	4.41	Roche Cobas E411
	ng/dl	0.229	0.172	0.286	
	pg/ml	2.30	1.73	2.87	
pmol/l	3.33	2.50	4.16	Roche Cobas 6000/8000	
ng/dl	0.216	0.163	0.269		
pg/ml	2.17	1.63	2.71		
pmol/l	1.78	1.34	2.23	SNIBE Maglumi Analysers	
ng/dl	0.116	0.087	0.145		
pg/ml	1.16	0.872	1.45		
pmol/l	3.02	1.81	4.23	Siemens Centaur CP	
ng/dl	0.196	0.118	0.274		
pg/ml	1.97	1.18	2.76		
Free T4	pmol/l	9.69	7.27	12.1	Abbott Architect
	ng/dl	0.756	0.567	0.945	
	pg/ml	7.56	5.67	9.45	
	pmol/l	8.04	6.03	10.1	Siemens Centaur XP/XPT/Classic
	ng/dl	0.627	0.470	0.784	
	pg/ml	6.27	4.70	7.84	
	pmol/l	10.7	8.03	13.4	CIS RIA Coated tube
	ng/dl	0.835	0.626	1.04	
	pg/ml	8.35	6.26	10.4	
	pmol/l	11.6	8.70	14.5	Siemens Dimension
	ng/dl	0.905	0.679	1.13	
	pg/ml	9.05	6.79	11.3	
	pmol/l	13.0	9.75	16.3	Siemens Immulite 2000/2500
	ng/dl	1.01	0.761	1.26	
	pg/ml	10.1	7.61	12.6	
pmol/l	12.8	9.60	16.0	Siemens Immulite 1000	
ng/dl	0.998	0.749	1.25		
pg/ml	9.98	7.49	12.5		



## IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 1816EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Free T4	pmol/l	10.1	7.58	12.6	Beckman DxI800
	ng/dl	0.788	0.591	0.985	
	pg/ml	7.88	5.91	9.85	
	pmol/l	13.6	10.2	17.0	Roche Elecsys
	ng/dl	1.06	0.796	1.32	
	pg/ml	10.6	7.96	13.2	
	pmol/l	13.1	9.83	16.4	Diasorin Liaison
	ng/dl	1.02	0.767	1.27	
	pg/ml	10.2	7.67	12.7	
	pmol/l	12.5	9.38	15.6	Roche Modular E170
	ng/dl	0.975	0.732	1.22	
	pg/ml	9.75	7.32	12.2	
	pmol/l	10.6	7.95	13.3	Beckman Access
	ng/dl	0.827	0.620	1.03	
	pg/ml	8.27	6.20	10.3	
	pmol/l	10.1	7.58	12.6	Tosoh Series
	ng/dl	0.788	0.591	0.985	
	pg/ml	7.88	5.91	9.85	
	pmol/l	23.5	17.6	29.4	Vitros ECI
	ng/dl	1.83	1.37	2.29	
	pg/ml	18.3	13.7	22.9	
	pmol/l	13.1	9.83	16.4	Roche Cobas 6000/8000
	ng/dl	1.02	0.767	1.27	
	pg/ml	10.2	7.67	12.7	
pmol/l	12.5	9.38	15.6	Immunotech IRMA	
ng/dl	0.975	0.732	1.22		
pg/ml	9.75	7.32	12.2		
pmol/l	13.9	10.4	17.4	Roche Cobas E411	
ng/dl	1.08	0.811	1.35		
pg/ml	10.8	8.11	13.5		
pmol/l	11.3	8.48	14.1	Siemens Dimension Vista LOCI	
ng/dl	0.881	0.661	1.10		
pg/ml	8.81	6.61	11.0		
pmol/l	13.2	9.90	16.5	SNIBE Maglumi Analysers	
ng/dl	1.03	0.772	1.29		
pg/ml	10.3	7.72	12.9		
pmol/l	10.4	7.80	13.0	Biomerieux Vidas FT4N Kit	
ng/dl	0.811	0.608	1.01		
pg/ml	8.11	6.08	10.1		
pmol/l	8.82	6.62	11.0	Siemens Centaur CP	
ng/dl	0.688	0.516	0.860		
pg/ml	6.88	5.16	8.60		
FSH	mU/ml	8.06	6.45	9.67	Abbott Architect
	mU/ml	9.30	7.44	11.2	BioMerieux Vidas

## IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 1816EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
FSH	mU/ml	11.1	7.77	14.4	Siemens Centaur XP/XPT/Classic
	mU/ml	8.96	7.17	10.8	Siemens Immulite 2000/2500
	mU/ml	9.39	7.51	11.3	Siemens Immulite 1000
	mU/ml	9.70	7.76	11.6	Beckman Dxl800
	mU/ml	9.07	7.26	10.9	Roche/BM Elecsys
	mU/ml	10.8	8.64	13.0	Diasorin Liaison
	mU/ml	8.16	6.53	9.79	Roche Modular E170
	mU/ml	9.51	7.61	11.4	Beckman Access
	mU/ml	11.1	8.88	13.3	Tosoh Series
	mU/ml	7.12	5.70	8.54	Vitros Eci
	mU/ml	9.00	7.20	10.8	Roche Cobas E411
	mU/ml	8.53	6.82	10.2	Roche Cobas 6000/8000
	mU/ml	10.1	8.08	12.1	SNIBE Maglumi Analysers
	mU/ml	7.41	5.93	8.89	Fujirebio Lumipulse G Series
	mU/ml	8.13	5.69	10.6	Siemens Centaur CP
Gentamicin	µmol/l	4.17	3.34	5.00	Roche Integra
	µg/ml	1.99	1.60	2.38	
	µmol/l	4.95	3.56	6.34	Siemens Centaur XP/XPT/Classic
	µg/ml	2.37	1.71	3.03	
	µmol/l	4.38	3.50	5.26	Siemens Dimension Vista
	µg/ml	2.09	1.67	2.51	
	µmol/l	3.32	2.66	3.98	Roche Cobas 6000/8000
	µg/ml	1.59	1.27	1.91	
	µmol/l	4.77	3.82	5.72	Beckman DxC
	µg/ml	2.28	1.83	2.73	
Growth Hormone (GH)	µU/ml	4.36	3.49	5.23	Siemens Immulite 2000/2500
	ng/ml	1.45	1.16	1.74	
	µU/ml	4.03	3.22	4.84	Siemens Immulite 1000
	ng/ml	1.34	1.07	1.61	
	µU/ml	3.01	2.41	3.61	Beckman Dxl800
	ng/ml	1.00	0.803	1.20	
	µU/ml	3.09	2.47	3.71	Beckman Access
	ng/ml	1.03	0.823	1.24	
	µU/ml	4.07	3.26	4.88	Tosoh Series
	ng/ml	1.36	1.09	1.63	
	µU/ml	3.45	2.76	4.14	Diasorin Liaison
	ng/ml	1.15	0.919	1.38	
	µU/ml	4.54	3.63	5.45	Roche Cobas E411
	ng/ml	1.51	1.21	1.81	
	µU/ml	6.39	5.11	7.67	SNIBE Maglumi Analysers
	ng/ml	2.13	1.70	2.56	
	µU/ml	4.45	3.56	5.34	Roche Cobas 6000/8000
	ng/ml	1.48	1.19	1.77	
	µU/ml	3.41	2.73	4.09	IDS iSYS
ng/ml	1.14	0.909	1.37		

## IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 1816EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Immunoglobulin E	KIU/l = IU/ml	272	218	326	Abbott Architect
	KIU/l = IU/ml	207	166	248	BioMerieux Vidas
	KIU/l = IU/ml	225	135	315	Siemens Centaur XP/XPT/Classic
	KIU/l = IU/ml	247	198	296	Siemens Immulite 2000/2500
	KIU/l = IU/ml	256	205	307	Siemens Immulite 1000
	KIU/l = IU/ml	271	217	325	Beckman Dxl800
	KIU/l = IU/ml	231	185	277	Roche Elecsys
	KIU/l = IU/ml	220	176	264	Pharmacia Unicap
	KIU/l = IU/ml	233	186	280	Roche Modular E170
	KIU/l = IU/ml	236	189	283	Tosoh Series
	KIU/l = IU/ml	240	192	288	Roche Cobas E411
	KIU/l = IU/ml	237	190	284	Roche Cobas 6000/8000
	KIU/l = IU/ml	196	157	235	SNIBE Maglumi Analysers
	KIU/l = IU/ml	201	161	241	Fujirebio Lumipulse G Series
	KIU/l = IU/ml	211	127	295	Siemens Centaur CP
Insulin	mU/l	1.94	1.46	2.42	Siemens Centaur XP/XPT/Classic
	mU/l	2.29	1.72	2.86	Roche Modular E170
	mU/l	2.59	1.94	3.24	Siemens Immulite 2000
	mU/l	2.19	1.64	2.74	Roche Elecsys
	mU/l	1.26	0.945	1.58	Beckman Access
	mU/l	1.60	1.20	2.00	Abbott Architect
	mU/l	2.36	1.77	2.95	Tosoh Series
	mU/l	2.13	1.60	2.66	Roche Cobas E411
	mU/l	1.25	0.938	1.56	Beckman Dxl 600/800
	mU/l	1.46	1.10	1.83	Diasorin Liaison
	mU/l	2.21	1.66	2.76	Roche Cobas 6000/8000
	mU/l	5.27	3.95	6.59	SNIBE Maglumi Analysers
	mU/l	1.70	1.28	2.13	Fujirebio Lumipulse G Series
	mU/l	1.79	1.34	2.24	Siemens Centaur CP
Luteinising Hormone (LH)	mU/ml	1.79	1.43	2.15	Abbott Architect
	mU/ml	2.55	2.04	3.06	BioMerieux Vidas
	mU/ml	2.38	1.79	2.97	Siemens Centaur XP/XPT/Classic
	mU/ml	5.86	4.69	7.03	Siemens Immulite 2000
	mU/ml	6.27	5.02	7.52	Siemens Immulite 1000
	mU/ml	1.65	1.32	1.98	Beckman Dxl800
	mU/ml	3.14	2.51	3.77	Roche Elecsys
	mU/ml	2.84	2.27	3.41	Diasorin Liaison
	mU/ml	3.08	2.46	3.70	Roche Modular E170
	mU/ml	1.69	1.35	2.03	Beckman Access
	mU/ml	2.14	1.71	2.57	Tosoh Series
	mU/ml	4.40	3.52	5.28	Vitros ECi
	mU/ml	3.08	2.46	3.70	Roche Cobas E411
	mU/ml	3.11	2.49	3.73	Roche Cobas 6000/8000
	mU/ml	3.35	2.68	4.02	SNIBE Maglumi Analysers
mU/ml	2.42	1.94	2.90	Fujirebio Lumipulse G Series	

## IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 1816EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Luteinising Hormone	mU/ml	2.19	1.64	2.74	Siemens Centaur CP
Oestradiol	pmol/l	244	195	293	Abbott Architect
	pg/ml	66.4	53.0	79.8	
	pmol/l	232	186	278	BioMerieux Vidas
	pg/ml	63.1	50.6	75.6	
	pmol/l	223	134	312	Siemens Centaur XP/XPT/Classic
	pg/ml	60.7	36.4	85.0	
	pmol/l	168	134	202	Siemens Immulite 2000/2500
	pg/ml	45.7	36.4	55.0	
	pmol/l	163	130	196	Siemens Immulite 1000
	pg/ml	44.3	35.4	53.2	
	pmol/l	185	148	222	Roche Elecsys (Estradiol II)
	pg/ml	50.3	40.3	60.3	
	pmol/l	140	112	168	Vitros ECi
	pg/ml	38.1	30.5	45.7	
	pmol/l	203	162	244	Roche Cobas 6000/8000 (Estradiol II)
	pg/ml	55.2	44.1	66.3	
	pmol/l	192	154	230	Roche Cobas 4000/E411 (Estradiol II)
	pg/ml	52.2	41.9	62.5	
	pmol/l	226	136	316	Siemens Centaur XP/XPT/Classic Enhanced (eE2)
	pg/ml	61.5	36.9	86.1	
	pmol/l	210	126	294	Siemens Centaur XP/XPT/Classic E26 III
	pg/ml	57.1	34.3	79.9	
	pmol/l	185	148	222	SNIBE Maglumi Analysers
pg/ml	50.3	40.3	60.3		
pmol/l	254	152	356	Siemens Centaur CP	
pg/ml	69.1	41.5	96.7		
pmol/l	223	134	312	Siemens Centaur CP Enhanced (eE2)	
pg/ml	60.7	36.4	85.0		
pmol/l	226	181	271	Fujirebio Lumipulse G Series	
pg/ml	61.5	49.2	73.8		
pmol/l	203	162	244	Roche Cobas 6000/8000 (Estradiol III)	
pg/ml	55.2	44.1	66.3		
pmol/l	187	150	224	Roche Elecsys (Estradiol III)	
pg/ml	50.9	40.8	61.0		
pmol/l	185	148	222	Roche Cobas 4000/E411 (Estradiol III)	
pg/ml	50.3	40.3	60.3		
pmol/l	211	169	253	Roche Modular E170 (Estradiol III)	
pg/ml	57.4	46.0	68.8		
Paracetamol	mmol/l	0.150	0.120	0.180	Roche Integra
	mg/l	22.7	18.2	27.2	
	mmol/l	0.161	0.129	0.193	Abbott Architect
	mg/l	24.4	19.5	29.3	
	mmol/l	0.132	0.106	0.158	Roche Cobas 6000/8000
	mg/l	20.0	16.0	24.0	
	mmol/l	0.166	0.130	0.200	Gravimetric
	mg/l	25.1	19.7	30.3	

## IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 1816EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods	
			low	high		
Phenobarbital	µmol/l	35.6	28.5	42.7	Abbott Architect	
	µg/ml	8.26	6.61	9.91		
	µmol/l	32.9	26.3	39.5	Roche Cobas 6000/8000	
	µg/ml	7.63	6.10	9.16		
	µmol/l	36.3	29.0	43.6	Siemens Immulite 2000/2500	
	µg/ml	8.42	6.73	10.1		
	µmol/l	32.9	26.3	39.5	Beckman AU400/600/640/2700/5400	
	µg/ml	7.63	6.10	9.16		
	µmol/l	42.5	29.8	55.2	Siemens Centaur XP/XPT/Classic	
	µg/ml	9.86	6.90	12.8		
	µmol/l	34.2	27.4	41.0	Roche Integra	
	µg/ml	7.93	6.36	9.50		
	µmol/l	37.3	29.8	44.8	Siemens Immulite 1000	
	µg/ml	8.65	6.91	10.4		
	µmol/l	28.4	22.7	34.1	Roche Cobas E411	
	µg/ml	6.59	5.27	7.91		
Phenytoin	µmol/l	32.1	25.7	38.5	Beckman DxC	
	µg/ml	7.45	5.96	8.94		
	µmol/l	34.5	27.6	41.4	Gravimetric	
	µg/ml	8.00	6.40	9.60		
	Phenytoin	µmol/l	19.3	15.4	23.2	Abbott Architect
		µg/ml	4.87	3.89	5.85	
	Phenytoin	µmol/l	18.4	13.8	23.0	Siemens Centaur XP/XPT/Classic
		µg/ml	4.65	3.49	5.81	
	Phenytoin	µmol/l	17.8	14.2	21.4	Siemens Dimension
		µg/ml	4.49	3.59	5.39	
	Phenytoin	µmol/l	18.7	15.0	22.4	Siemens Immulite 2000/2500
		µg/ml	4.72	3.79	5.65	
	Phenytoin	µmol/l	19.2	15.4	23.0	Siemens Immulite 1000
		µg/ml	4.85	3.89	5.81	
	Phenytoin	µmol/l	18.8	15.0	22.6	Roche Integra
		µg/ml	4.75	3.79	5.71	
Phenytoin	µmol/l	15.4	12.3	18.5	Vitros	
	µg/ml	3.89	3.11	4.67		
Phenytoin	µmol/l	18.6	14.9	22.3	Roche Cobas E411	
	µg/ml	4.70	3.76	5.64		
Phenytoin	µmol/l	18.5	14.8	22.2	Roche Cobas 6000/8000	
	µg/ml	4.67	3.74	5.60		
Phenytoin	µmol/l	19.0	15.2	22.8	Beckman DxC	
	µg/ml	4.80	3.84	5.76		
Phenytoin	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	3.28	2.62	3.94	Abbott Architect	
	ng/ml	1.03	0.820	1.24		

## IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 1816EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Progesterone	nmol/l	4.60	3.68	5.52	BioMerieux Vidas
	ng/ml	1.44	1.15	1.73	
	nmol/l	2.47	1.36	3.58	Siemens Centaur XP/XPT/Classic
	ng/ml	0.773	0.425	1.12	
	nmol/l	3.60	2.88	4.32	Siemens Immulite 2000/2500
	ng/ml	1.13	0.901	1.36	
	nmol/l	3.61	2.89	4.33	Siemens Immulite 1000
	ng/ml	1.13	0.905	1.36	
	nmol/l	3.49	2.79	4.19	Beckman Dxl Prog Cal 33555
	ng/ml	1.09	0.873	1.31	
	nmol/l	3.39	2.71	4.07	Roche Elecsys (Prog. II)
	ng/ml	1.06	0.848	1.27	
	nmol/l	3.50	2.80	4.20	Beckman Access Prog Cal 33555
	ng/ml	1.10	0.876	1.32	
	nmol/l	2.64	2.11	3.17	Tosoh Series
	ng/ml	0.826	0.660	0.992	
	nmol/l	3.09	2.47	3.71	Vitros ECI
	ng/ml	0.967	0.773	1.16	
	nmol/l	3.42	2.74	4.10	Roche Cobas 4000/e411 (Prog. II)
	ng/ml	1.07	0.858	1.28	
	nmol/l	3.62	2.90	4.34	Roche Cobas 6000/8000 (Prog. II)
	ng/ml	1.13	0.908	1.35	
	nmol/l	2.88	2.30	3.46	Diasorin Liaison
	ng/ml	0.901	0.720	1.08	
	nmol/l	1.92	1.54	2.30	SNIBE Maglumi Analysers
	ng/ml	0.601	0.482	0.720	
	nmol/l	3.26	2.61	3.91	Beckman Dxl Prog DE Cal A80773
	ng/ml	1.02	0.817	1.22	
nmol/l	2.79	1.53	4.05	Siemens Centaur CP	
ng/ml	0.873	0.480	1.27		
nmol/l	3.55	2.84	4.26	Roche Cobas 6000/8000 (Prog. III)	
ng/ml	1.11	0.889	1.33		
nmol/l	3.22	2.58	3.86	Roche Elecsys (Prog. III)	
ng/ml	1.01	0.808	1.21		
nmol/l	3.47	2.78	4.16	Roche Cobas 4000/e411 (Prog. III)	
ng/ml	1.09	0.870	1.31		
nmol/l	3.69	2.95	4.43	Roche Modular E170 (Prog. III)	
ng/ml	1.15	0.923	1.38		
Prolactin	µU/ml	162	130	194	Abbott Architect
	µU/ml	161	129	193	BioMerieux Vidas
	µU/ml	150	105	195	Siemens Centaur XP/XPT/Classic
	µU/ml	145	116	174	Siemens Immulite 2000/2500
	µU/ml	163	130	196	Siemens Immulite 1000
	µU/ml	145	116	174	Beckman Dxl800
	µU/ml	162	130	194	Roche Elecsys

## IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 1816EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Prolactin	µU/ml	172	138	206	Diasorin Liaison
	µU/ml	153	122	184	Roche Modular E170
	µU/ml	148	118	178	Beckman Access
	µU/ml	177	142	212	Tosoh Series
	µU/ml	184	147	221	Vitros ECi
	µU/ml	155	124	186	Roche Elecsys/E170/Cobas 6000/8000 PRLII
	µU/ml	175	140	210	Immunotech IRMA
	µU/ml	160	128	192	Roche Cobas E411
	µU/ml	155	124	186	Roche Cobas 6000/8000
	µU/ml	179	143	215	SNIBE Maglumi Analysers
	µU/ml	187	150	224	Fujirebio Lumipulse G Series
	µU/ml	160	128	192	Abbott Architect restandardised
	µU/ml	141	98.7	183	Siemens Centaur CP
PSA Free	ng/ml = µg/l	1.40	1.05	1.75	Abbott Architect
	ng/ml = µg/l	1.82	1.37	2.28	BioMerieux Vidas
	ng/ml = µg/l	1.72	1.29	2.15	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	1.12	0.840	1.40	Siemens Dimension
	ng/ml = µg/l	1.44	1.08	1.80	Siemens Immulite 2000/2500
	ng/ml = µg/l	1.27	0.953	1.59	Siemens Immulite 1000
	ng/ml = µg/l	2.00	1.50	2.50	Beckman DXI standardised to Hybritech
	ng/ml = µg/l	1.50	1.13	1.88	Roche Elecsys
	ng/ml = µg/l	0.409	0.307	0.511	Diasorin Liaison
	ng/ml = µg/l	1.51	1.13	1.89	Roche Modular E170
	ng/ml = µg/l	2.09	1.57	2.61	Beckman Access standardised to Hybritech
	ng/ml = µg/l	1.42	1.07	1.78	Tosoh Series
	ng/ml = µg/l	1.53	1.15	1.91	Roche Cobas E411
	ng/ml = µg/l	1.50	1.13	1.88	Roche Cobas 6000/8000
	ng/ml = µg/l	1.64	1.23	2.05	Beckman Dxl800 standardised to WHO IRP96/670
	ng/ml = µg/l	1.19	0.893	1.49	SNIBE Maglumi Analysers
	ng/ml = µg/l	1.34	1.01	1.68	Ortho Vitros 3600/5600/ECi PSA II
ng/ml = µg/l	1.12	0.840	1.40	Fujirebio Lumipulse G Series	
PSA Total	ng/ml = µg/l	1.62	1.22	2.03	Abbott Architect
	ng/ml = µg/l	1.89	1.42	2.36	BioMerieux Vidas
	ng/ml = µg/l	1.96	1.47	2.45	bioMerieux VIDAS TPSA
	ng/ml = µg/l	1.65	1.24	2.06	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	1.57	1.18	1.96	Siemens Immulite 2000/2500 1st generation
	ng/ml = µg/l	1.66	1.25	2.08	Siemens Immulite 2000/2500 3rd generation
	ng/ml = µg/l	1.55	1.16	1.94	Siemens Immulite 1000 1st generation
	ng/ml = µg/l	1.67	1.25	2.09	Beckman Dxl standardisd to Hybritech
	ng/ml = µg/l	1.48	1.11	1.85	Beckman Dxl800 standardised to WHO IRP96/670
	ng/ml = µg/l	1.88	1.41	2.35	Roche Elecsys
	ng/ml = µg/l	0.441	0.331	0.551	Diasorin Liaison
	ng/ml = µg/l	1.95	1.46	2.44	Roche Modular E170
	ng/ml = µg/l	1.72	1.29	2.15	Beckman Access standardised to Hybritech
	ng/ml = µg/l	1.61	1.21	2.01	Beckman Access standardised to WHO IRP96/670
ng/ml = µg/l	1.09	0.818	1.36	Tosoh Series	

## IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 1816EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
PSA Total	ng/ml = µg/l	1.87	1.40	2.34	Vitros ECI
	ng/ml = µg/l	1.96	1.47	2.45	CIS RIA Coated tube
	ng/ml = µg/l	1.95	1.46	2.44	Roche Cobas E411
	ng/ml = µg/l	2.01	1.51	2.51	Roche Cobas 6000/8000
	ng/ml = µg/l	2.31	1.73	2.89	SNIBE Maglumi Analysers
	ng/ml = µg/l	1.37	1.03	1.71	Fujirebio Lumipulse G Series
	ng/ml = µg/l	1.90	1.43	2.38	Ortho Vitros 3600/5600/ECi PSA II
	ng/ml = µg/l	1.57	1.18	1.96	Siemens Centaur CP
Salicylic Acid	mmol/l	0.362	0.290	0.434	Abbott Architect
	mg/dl	5.00	4.01	5.99	
	mmol/l	0.286	0.230	0.340	Gravimetric
	mg/dl	3.95	3.18	4.70	
SHBG	nmol/l	12.0	9.60	14.4	Siemens Centaur XP/XPT/Classic
	nmol/l	11.0	8.80	13.2	Siemens Immulite 1000
	nmol/l	11.1	8.88	13.3	Siemens Immulite 2000/2500
	nmol/l	12.4	9.92	14.9	Roche Elecsys
	nmol/l	11.9	9.52	14.3	Roche Modular E170
	nmol/l	10.7	8.56	12.8	Abbott Architect
	nmol/l	12.0	9.60	14.4	Roche Cobas E411
	nmol/l	11.9	9.52	14.3	Roche Cobas 6000/8000
	nmol/l	11.2	8.96	13.4	Beckman DxI800
	nmol/l	11.9	9.52	14.3	SNIBE Maglumi Analysers
T Uptake	%U	33.4	27.4	39.4	Siemens Immulite 2000
Testosterone	nmol/l	1.74	1.39	2.09	Abbott Architect
	ng/ml	0.501	0.400	0.602	
	ng/dl	50.1	40.0	60.2	
	nmol/l	1.03	0.824	1.24	BioMerieux Vidas
	ng/ml	0.297	0.237	0.357	
	ng/dl	29.7	23.7	35.7	
	nmol/l	1.53	1.22	1.84	CIS RIA Coated tube
	ng/ml	0.441	0.351	0.531	
	ng/dl	44.1	35.1	53.1	
	nmol/l	1.20	0.960	1.44	Siemens Immulite 2000/2500
	ng/ml	0.346	0.276	0.416	
	ng/dl	34.6	27.6	41.6	
	nmol/l	1.37	1.10	1.64	Siemens Immulite 1000
	ng/ml	0.395	0.317	0.473	
	ng/dl	39.5	31.7	47.3	
	nmol/l	1.61	1.29	1.93	Beckman DxI800
	ng/ml	0.464	0.372	0.556	
	ng/dl	46.4	37.2	55.6	
	nmol/l	1.68	1.34	2.02	Beckman Access
	ng/ml	0.484	0.386	0.582	
ng/dl	48.4	38.6	58.2		
nmol/l	1.12	0.896	1.34	Vitros ECI	
ng/ml	0.323	0.258	0.388		
ng/dl	32.3	25.8	38.8		



## IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 1816EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Testosterone	nmol/l	1.77	1.42	2.12	Roche Cobas 6000 Test 2
	ng/ml	0.510	0.409	0.611	
	ng/dl	51.0	40.9	61.1	
	nmol/l	1.73	1.38	2.08	Roche Elecsys Test II
	ng/ml	0.498	0.397	0.599	
	ng/dl	49.8	39.7	59.9	
	nmol/l	1.80	1.44	2.16	Roche Modular E170 Test II
	ng/ml	0.518	0.415	0.621	
	ng/dl	51.8	41.5	62.1	
	nmol/l	1.81	1.45	2.17	Roche Cobas 4000/e411 Test II
	ng/ml	0.521	0.418	0.624	
	ng/dl	52.1	41.8	62.4	
	nmol/l	1.81	1.45	2.17	Abbott Architect 2nd Generation
	ng/ml	0.521	0.418	0.624	
	ng/dl	52.1	41.8	62.4	
	nmol/l	1.92	1.25	2.59	Siemens Centaur CP
	ng/ml	0.553	0.359	0.747	
	ng/dl	55.3	35.9	74.7	
Theophylline	nmol/l	1.07	0.856	1.28	BioMerieux Vidas Testosterone II
	ng/ml	0.308	0.247	0.369	
	ng/dl	30.8	24.7	36.9	
	nmol/l	1.54	1.00	2.08	Siemens Centaur TST II
	ng/ml	0.444	0.289	0.599	
	ng/dl	44.4	28.9	59.9	
	μmol/l	33.2	23.2	43.2	Siemens Centaur XP/XPT/Classic
	μg/ml	5.98	4.19	7.77	
	μmol/l	24.2	19.4	29.0	Siemens Dimension
	μg/ml	4.36	3.50	5.22	
	μmol/l	28.3	22.6	34.0	Roche Integra
	μg/ml	5.10	4.07	6.13	
	μmol/l	25.2	20.2	30.2	Abbott Architect
	μg/ml	4.54	3.64	5.44	
	μmol/l	26.6	21.3	31.9	Roche Cobas 6000/8000
	μg/ml	4.79	3.84	5.74	
	μmol/l	23.3	18.6	28.0	Beckman DxC
	μg/ml	4.20	3.35	5.05	
μmol/l	22.1	17.7	26.5	Beckman AU400/600/640/2700/5400	
μg/ml	3.98	3.19	4.77		
μmol/l	28.3	22.6	34.0	Gravimetric	
μg/ml	5.10	4.07	6.13		
Thyroglobulin	ng/ml	2.93	2.20	3.66	Roche Elecsys
	ng/ml	2.12	1.59	2.65	Beckman Dxl800
	ng/ml	3.07	2.30	3.84	Roche Cobas E411
	ng/ml	2.98	2.24	3.73	Roche Cobas 6000/8000
	ng/ml	2.21	1.66	2.76	Beckman Access

## IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 1816EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Range					
Analyte	unit	Target	low	high	methods
Thyroglobulin	ng/ml	1.32	0.990	1.65	SNIBE Maglumi Analysers
	ng/ml	3.24	2.43	4.05	Tosoh Series
	ng/ml	2.92	2.19	3.65	Roche Cobas 6000 TGII
	ng/ml	2.95	2.21	3.69	Roche Elecsys TGII
	ng/ml	2.99	2.24	3.74	Roche Cobas 4000/E411 TGII
	ng/ml	2.91	2.18	3.64	Roche Modular E170 TGII
Thyroid Stimulating Hormone	µU/ml = mIU/l	0.126	0.101	0.151	Abbott Architect
	µU/ml = mIU/l	0.097	0.078	0.116	bioMerieux VIDAS TSH
	µU/ml = mIU/l	0.093	0.074	0.112	bioMerieux VIDAS TSH3 Ultrasensitive
	µU/ml = mIU/l	0.127	0.086	0.168	Siemens Centaur XP/XPT/Classic
	µU/ml = mIU/l	0.122	0.083	0.161	Siemens Centaur XP/XPT/Classic 3rd Generation
	µU/ml = mIU/l	0.133	0.106	0.160	Siemens Immulite 2000/2500
	µU/ml = mIU/l	0.145	0.116	0.174	Siemens Immulite 1000
	µU/ml = mIU/l	0.115	0.092	0.138	Beckman Dxl800 Fast TSH
	µU/ml = mIU/l	0.110	0.088	0.132	Beckman Dxl800
	µU/ml = mIU/l	0.167	0.134	0.200	Roche Elecsys
	µU/ml = mIU/l	0.168	0.134	0.202	Diasorin Liaison
	µU/ml = mIU/l	0.170	0.136	0.204	Roche Modular E170
	µU/ml = mIU/l	0.112	0.090	0.134	Beckman Access Fast TSH
	µU/ml = mIU/l	0.115	0.092	0.138	Beckman Access hyperTSH 3rd Generation
	µU/ml = mIU/l	0.186	0.149	0.223	Tosoh Series
	µU/ml = mIU/l	0.248	0.198	0.298	Vitros ECi
	µU/ml = mIU/l	0.165	0.132	0.198	Roche Cobas E411
	µU/ml = mIU/l	0.167	0.134	0.200	Roche Cobas 6000/8000
	µU/ml = mIU/l	0.113	0.090	0.136	Beckman Dxl800 Hyper TSH
	µU/ml = mIU/l	0.121	0.097	0.145	Siemens Dimension Vista LOCI
µU/ml = mIU/l	0.182	0.146	0.218	SNIBE Maglumi Analysers	
µU/ml = mIU/l	0.128	0.087	0.169	Siemens Centaur XP/XPT/Classic TSH3-Ultra	
µU/ml = mIU/l	0.130	0.088	0.172	Siemens Centaur CP	
µU/ml = mIU/l	0.127	0.086	0.168	Siemens Centaur CP TSH3-Ultra	
µU/ml = mIU/l	0.111	0.089	0.133	Beckman Dxl 600/800 Access (3rd IS)	
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	5.29	4.23	6.35	Abbott Architect
	IU/ml	0.005	0.004	0.006	
	mU/ml=IU/l	9.81	7.85	11.8	BioMerieux Vidas
	IU/ml	0.010	0.008	0.012	
	mU/ml=IU/l	10.0	6.00	14.0	Siemens Centaur XP/XPT/Classic
	IU/ml	0.010	0.006	0.014	
	mU/ml=IU/l	9.94	7.95	11.9	Siemens Dimension
	IU/ml	0.010	0.008	0.012	
	mU/ml=IU/l	12.8	10.2	15.4	Siemens Immulite 2000
	IU/ml	0.013	0.010	0.016	
mU/ml=IU/l	12.8	10.2	15.4	Siemens Immulite 1000	
IU/ml	0.013	0.010	0.016		
mU/ml=IU/l	5.94	4.75	7.13	Beckman Dxl800	
IU/ml	0.006	0.005	0.007		

## IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 1816EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Total Beta hCG	mU/ml=IU/l	4.38	3.50	5.26	Diasorin Liaison
	IU/ml	0.004	0.004	0.004	
	mU/ml=IU/l	5.55	4.44	6.66	Roche Cobas Core EIA
	IU/ml	0.006	0.004	0.008	
	mU/ml=IU/l	5.85	4.68	7.02	Beckman Access
	IU/ml	0.006	0.005	0.007	
	mU/ml=IU/l	9.95	7.96	11.9	Tosoh Series
	IU/ml	0.010	0.008	0.012	
	mU/ml=IU/l	11.3	9.04	13.6	Vitros ECI
	IU/ml	0.011	0.009	0.013	
	mU/ml=IU/l	7.14	5.71	8.57	Roche STAT (Intact)
	IU/ml	0.007	0.006	0.008	
	mU/ml=IU/l	5.68	4.54	6.82	Roche hCG+Beta
	IU/ml	0.006	0.005	0.007	
	mU/ml=IU/l	6.62	5.30	7.94	SNIBE Maglumi Analysers
	IU/ml	0.007	0.005	0.009	
	mU/ml=IU/l	4.34	3.47	5.21	Fujirebio Lumipulse G Series
	IU/ml	0.004	0.003	0.005	
	mU/ml=IU/l	5.93	4.74	7.12	Beckman Access Total BhCG (5th IS)
	IU/ml	0.006	0.005	0.007	
mU/ml=IU/l	5.92	4.74	7.10	Beckman Dxl Total BhCG (5th IS)	
IU/ml	0.006	0.005	0.007		
mU/ml=IU/l	7.46	4.48	10.4	Siemens Centaur CP	
IU/ml	0.007	0.004	0.010		
Total T3	nmol/l	0.655	0.491	0.819	Abbott Architect
	ng/ml	0.426	0.320	0.532	
	ng/dl	42.6	32.0	53.2	
	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	0.616	0.462	0.770	Siemens Immulite 1000
	ng/ml	0.401	0.301	0.501	
	ng/dl	40.1	30.1	50.1	
	nmol/l	0.711	0.533	0.889	Beckman Dxl800
	ng/ml	0.463	0.347	0.579	
	ng/dl	46.3	34.7	57.9	
	nmol/l	1.18	0.885	1.48	Roche Elecsys
	ng/ml	0.768	0.576	0.960	
	ng/dl	76.8	57.6	96.0	
	nmol/l	0.731	0.548	0.914	Diasorin Liaison
	ng/ml	0.476	0.357	0.595	
	ng/dl	47.6	35.7	59.5	
	nmol/l	0.788	0.591	0.985	Beckman Access
	ng/ml	0.513	0.385	0.641	
ng/dl	51.3	38.5	64.1		

## IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 1816EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Total T3	nmol/l	0.422	0.317	0.528	Tosoh Series
	ng/ml	0.275	0.206	0.344	
	ng/dl	27.5	20.6	34.4	
	nmol/l	0.737	0.553	0.921	Vitros ECi
	ng/ml	0.480	0.360	0.600	
	ng/dl	48.0	36.0	60.0	
	nmol/l	0.496	0.372	0.620	CIS RIA Coated tube
	ng/ml	0.323	0.242	0.404	
	ng/dl	32.3	24.2	40.4	
	nmol/l	1.22	0.915	1.53	Roche Cobas E411
	ng/ml	0.794	0.596	0.992	
	ng/dl	79.4	59.6	99.2	
nmol/l	1.08	0.810	1.35	Roche Cobas 6000/8000	
ng/ml	0.703	0.527	0.879		
ng/dl	70.3	52.7	87.9		
nmol/l	0.390	0.293	0.488	SNIBE Maglumi Analysers	
ng/ml	0.254	0.191	0.317		
ng/dl	25.4	19.1	31.7		
nmol/l	0.521	0.391	0.651	Siemens Centaur CP	
ng/ml	0.339	0.254	0.424		
ng/dl	33.9	25.4	42.4		
Total T4	nmol/l	34.8	26.1	43.5	Abbott Architect
	µg/dl	2.71	2.04	3.38	
	ng/ml	27.1	20.4	33.8	
	nmol/l	32.5	24.4	40.6	BioMerieux Vidas
	µg/dl	2.54	1.90	3.18	
	ng/ml	25.4	19.0	31.8	
	nmol/l	23.2	16.2	30.2	Siemens Centaur XP/XPT/Classic
	µg/dl	1.81	1.27	2.35	
	ng/ml	18.1	12.7	23.5	
	nmol/l	22.7	17.0	28.4	Siemens Immulite 2000/2500
	µg/dl	1.77	1.33	2.21	
	ng/ml	17.7	13.3	22.1	
	nmol/l	25.0	18.8	31.3	Siemens Immulite 1000
	µg/dl	1.95	1.47	2.43	
	ng/ml	19.5	14.7	24.3	
	nmol/l	36.2	27.2	45.3	Roche Elecsys
	µg/dl	2.82	2.12	3.52	
	ng/ml	28.2	21.2	35.2	
nmol/l	28.3	21.2	35.4	Diasorin Liaison	
µg/dl	2.21	1.65	2.77		
ng/ml	22.1	16.5	27.7		
nmol/l	23.3	17.5	29.1	Beckman Access	
µg/dl	1.82	1.37	2.27		
ng/ml	18.2	13.7	22.7		
nmol/l	24.4	18.3	30.5	Tosoh Series	
µg/dl	1.90	1.43	2.37		
ng/ml	19.0	14.3	23.7		

## IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 1816EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Total T4	nmol/l	27.8	20.9	34.8	Vitros ECI
	µg/dl	2.17	1.63	2.71	
	ng/ml	21.7	16.3	27.1	
	nmol/l	29.0	21.8	36.3	CIS RIA Coated tube
	µg/dl	2.26	1.70	2.82	
	ng/ml	22.6	17.0	28.2	
	nmol/l	36.0	27.0	45.0	Roche Cobas E411
	µg/dl	2.81	2.11	3.51	
	ng/ml	28.1	21.1	35.1	
	nmol/l	34.1	25.6	42.6	Roche Cobas 6000/8000
	µg/dl	2.66	2.00	3.32	
	ng/ml	26.6	20.0	33.2	
	nmol/l	29.2	21.9	36.5	Immunotech IRMA
	µg/dl	2.28	1.71	2.85	
ng/ml	22.8	17.1	28.5		
nmol/l	32.9	24.7	41.1	SNIBE Maglumi Analysers	
µg/dl	2.57	1.93	3.21		
ng/ml	25.7	19.3	32.1		
Valproic Acid	µmol/l	222	178	266	Abbott Architect
	µg/ml	32.0	25.7	38.3	
	µmol/l	235	165	305	Siemens Centaur XP/XPT/Classic
	µg/ml	33.9	23.7	44.1	
	µmol/l	207	166	248	Siemens Dimension
	µg/ml	29.9	24.0	35.8	
	µmol/l	186	149	223	Siemens Immulite 2000/2500
	µg/ml	26.8	21.5	32.1	
	µmol/l	195	156	234	Siemens Immulite 1000
	µg/ml	28.1	22.5	33.7	
	µmol/l	197	158	236	Roche Integra
	µg/ml	28.4	22.8	34.0	
	µmol/l	169	135	203	Vitros
	µg/ml	24.4	19.5	29.3	
	µmol/l	205	164	246	Roche Cobas E411
	µg/ml	29.6	23.7	35.5	
	µmol/l	198	158	238	Roche Cobas 6000/8000
	µg/ml	28.6	22.8	34.4	
µmol/l	151	121	181	Beckman DxC	
µg/ml	21.8	17.5	26.1		
µmol/l	208	166	250	Beckman AU400/600/640/2700/5400	
µg/ml	30.0	24.0	36.0		
µmol/l	215	172	258	Siemens ADVIA 1200/1650/1800/2400	
µg/ml	31.0	24.8	37.2		
µmol/l	243	194	292	Gravimetric	
µg/ml	35.1	28.0	42.1		

## IMMUNOASSAY PREMIUM - LEVEL 1 (IA PREMIUM 1)

Cat. No. IA2638 / IA2633 Lot No. 1816EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Vancomycin	µmol/l	3.94	3.15	4.73	Roche Integra
	µg/ml	5.85	4.68	7.02	
	µmol/l	3.20	2.56	3.84	Abbott Architect
	µg/ml	4.75	3.80	5.70	
	µmol/l	2.35	1.76	2.94	Siemens Centaur XP/XPT/Classic
	µg/ml	3.49	2.62	4.36	
	µmol/l	2.85	2.28	3.42	Siemens Dimension
	µg/ml	4.23	3.39	5.07	
Vitamin B12	µmol/l	3.35	2.68	4.02	Roche Cobas 6000/8000
	µg/ml	4.98	3.98	5.98	
	µmol/l	3.43	2.74	4.12	Gravimetric
	µg/ml	5.10	4.07	6.12	
	pmol/l	138	110	166	Abbott Architect
	pg/ml	187	149	225	
	pmol/l	124	86.8	161	Siemens Centaur XP/XPT/Classic
	pg/ml	168	118	218	
	pmol/l	87.5	70.0	105	Beckman DxI800
	pg/ml	119	94.9	143	
	pmol/l	138	110	166	Roche Modular E170
	pg/ml	187	149	225	
	pmol/l	92.3	73.8	111	Beckman Access
	pg/ml	125	100	150	
	pmol/l	134	107	161	Tosoh Series
	pg/ml	182	145	219	
	pmol/l	144	115	173	Vitros ECI
	pg/ml	195	156	234	
	pmol/l	121	96.8	145	MP Biomedicals RIA
	pg/ml	164	131	197	
pmol/l	167	134	200	Roche Cobas E411	
pg/ml	226	182	270		
pmol/l	132	106	158	Roche Cobas 6000/8000	
pg/ml	179	144	214		
pmol/l	114	91.2	137	Siemens Dimension	
pg/ml	154	124	184		
pmol/l	158	126	190	SNIBE Maglumi Analysers	
pg/ml	214	171	257		
pmol/l	117	81.9	152	Siemens Centaur CP	
pg/ml	159	111	207		

## IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

<b>CAT. NO.</b> IA2639	<b>GTIN:</b> 05055273203851	<b>SIZE:</b> 12 x 5 ml
<b>CAT. NO.</b> IA2633	<b>GTIN:</b> 05055273203837	<b>SIZE:</b> 4 x 5 ml
<b>LOT NO.</b> 1817EC	<b>EXPIRY:</b> 2021-05-28	

### 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.

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.

- 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.
- Refer to the Control section of the individual analyser application.
- 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](mailto:Technical.Services@randox.com).

06 Dec '18 ne

## IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 1817EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods	
			low	high		
17-OH-Progesterone	nmol/l	9.97	7.48	12.5	Immunotech RIA	
	ng/ml	3.30	2.48	4.12		
	nmol/l	14.1	10.6	17.6	DRG ELISA	
	ng/ml	4.67	3.51	5.83		
	nmol/l	14.5	10.9	18.1	DIASource RIA	
	ng/ml	4.80	3.61	5.99		
25-OH Vitamin D	nmol/l	14.6	11.0	18.3	DiaMetra ELISA	
	ng/ml	4.83	3.64	6.02		
	nmol/l	11.8	8.85	14.8	SNIBE Maglumi Analysers	
	ng/ml	3.91	2.93	4.89		
	nmol/l	71.9	53.9	89.9	Diasorin Liaison	
	nmol/l	84.1	63.1	105	Siemens Centaur XP/XPT/Classic	
25-OH Vitamin D	nmol/l	56.1	42.1	70.1	Roche Vitamin D Total	
	nmol/l	67.8	50.9	84.8	HPLC	
	nmol/l	57.7	43.3	72.1	Abbott Architect	
	nmol/l	62.0	46.5	77.5	IDS iSYS	
	nmol/l	71.6	53.7	89.5	SNIBE Maglumi Analysers	
	nmol/l	77.0	57.8	96.3	Vitros ECi	
	nmol/l	64.6	48.5	80.8	Tosoh Series	
	nmol/l	73.9	55.4	92.4	BioMerieux Vidas	
	nmol/l	55.2	41.4	69.0	Beckman Dxl 600/800	
	nmol/l	57.1	42.8	71.4	Fujirebio Lumipulse G Series	
	nmol/l	58.0	43.5	72.5	Beckman Access 25 OH Vitamin D Total	
	nmol/l	59.5	44.6	74.4	Roche Vitamin D Total II	
ACTH	pmol/l	9.35	7.01	11.7	Siemens Immulite 2000/2500	
	pg/ml	42.5	31.9	53.1		
	pmol/l	4.46	3.35	5.58	Roche Cobas 6000/8000	
	pg/ml	20.3	15.2	25.4		
	pmol/l	15.3	11.5	19.1	CIS IRMA	
	pg/ml	69.5	52.3	86.7		
ACTH	pmol/l	9.29	6.97	11.6	Siemens Immulite 1000	
	pg/ml	42.2	31.7	52.7		
	pmol/l	11.6	8.70	14.5	SNIBE Maglumi Analysers	
	pg/ml	52.7	39.5	65.9		
	Aldosterone	pmol/l	93.8	70.4	117	CIS RIA
		pg/ml	33.8	25.4	42.2	
pmol/l		347	260	434	ELISA	
pg/ml		125	93.8	156		
pmol/l		351	263	439	SNIBE Maglumi Analysers	
pg/ml		127	94.9	159		
Aldosterone	pmol/l	298	224	373	IDS iSYS	
	pg/ml	108	80.8	135		



## IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 1817EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Aldosterone	pmol/l	290	218	363	Diasorin Liaison
	pg/ml	105	78.7	131	
Alpha-fetoprotein	KIU/l = IU/ml	45.6	36.5	54.7	Abbott Architect
	ng/ml	55.2	44.2	66.2	
	KIU/l = IU/ml	41.9	33.5	50.3	BioMerieux Vidas
	ng/ml	50.7	40.5	60.9	
	KIU/l = IU/ml	54.1	42.7	65.5	Siemens Centaur XP/XPT/Classic
	ng/ml	65.5	51.7	79.3	
	KIU/l = IU/ml	42.7	34.2	51.2	Siemens Immulite 2000/2500
	ng/ml	51.7	41.4	62.0	
	KIU/l = IU/ml	44.7	35.8	53.6	Siemens Immulite 1000
	ng/ml	54.1	43.3	64.9	
	KIU/l = IU/ml	46.2	37.0	55.4	Beckman Dxl800
	ng/ml	55.9	44.8	67.0	
	KIU/l = IU/ml	48.5	38.8	58.2	Roche Elecsys
	ng/ml	58.7	46.9	70.5	
	KIU/l = IU/ml	49.2	39.4	59.0	Diasorin Liaison
	ng/ml	59.5	47.7	71.3	
	KIU/l = IU/ml	49.6	39.7	59.5	Roche Modular E170
	ng/ml	60.0	48.0	72.0	
	KIU/l = IU/ml	48.6	38.9	58.3	Beckman Access
	ng/ml	58.8	47.1	70.5	
	KIU/l = IU/ml	44.6	35.7	53.5	Tosoh Series
	ng/ml	54.0	43.2	64.8	
	KIU/l = IU/ml	49.5	39.6	59.4	Vitros ECI
	ng/ml	59.9	47.9	71.9	
KIU/l = IU/ml	49.7	39.8	59.6	Roche Cobas 6000/8000	
ng/ml	60.1	48.2	72.0		
KIU/l = IU/ml	66.4	53.1	79.7	CIS IRMA	
ng/ml	80.3	64.3	96.3		
KIU/l = IU/ml	49.9	39.9	59.9	Roche Cobas E411	
ng/ml	60.4	48.3	72.5		
KIU/l = IU/ml	44.3	35.4	53.2	SNIBE Maglumi Analysers	
ng/ml	53.6	42.8	64.4		
KIU/l = IU/ml	46.8	37.4	56.2	Fujirebio Lumipulse G Series	
ng/ml	56.6	45.3	67.9		
KIU/l = IU/ml	52.0	41.6	62.4	Siemens Dimension	
ng/ml	62.9	50.3	75.5		
KIU/l = IU/ml	52.5	41.5	63.5	Siemens Centaur CP	
ng/ml	63.5	50.2	76.8		
Amikacin	µmol/l	13.9	11.1	16.7	Roche Cobas 6000/8000
	µg/ml	8.14	6.50	9.78	
	µmol/l	15.2	12.2	18.2	Gravimetric
	µg/ml	8.90	7.14	10.7	
Androstenedione	nmol/l	13.3	9.98	16.6	Siemens Immulite 2000
	ng/ml	3.82	2.86	4.78	

## IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 1817EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Beta-2-microglobulin	µg/ml = mg/l	3.44	2.75	4.13	Abbott Architect
	µg/ml = mg/l	3.58	2.86	4.30	BioMerieux Vidas
	µg/ml = mg/l	3.46	2.77	4.15	Behring Nephelometer
	µg/ml = mg/l	3.12	2.50	3.74	Siemens Immulite 2000/2500
	µg/ml = mg/l	3.85	3.08	4.62	Siemens Immulite 1000
	µg/ml = mg/l	3.00	2.40	3.60	Diasorin Liaison
	µg/ml = mg/l	3.36	2.69	4.03	Tosoh Series
	µg/ml = mg/l	3.47	2.78	4.16	Roche Cobas 6000/8000
	µg/ml = mg/l	3.42	2.74	4.10	Siemens Dimension
	µg/ml = mg/l	2.79	2.23	3.35	SNIBE Maglumi Analysers
C-Peptide	µg/ml = mg/l	2.96	2.37	3.55	Fujirebio Lumipulse G Series
	nmol/l	1.670	1.250	2.090	Siemens Immulite 2000/2500
	ng/ml	5.04	3.77	6.31	
	nmol/l	1.730	1.300	2.160	Roche Elecsys
	ng/ml	5.22	3.92	6.52	
	nmol/l	1.720	1.290	2.150	Roche Cobas 6000/8000
	ng/ml	5.19	3.89	6.49	
	nmol/l	1.590	1.190	1.990	Siemens Immulite 1000
	ng/ml	4.80	3.59	6.01	
	nmol/l	1.980	1.490	2.480	Diasorin Liaison
	ng/ml	5.98	4.50	7.46	
	nmol/l	1.740	1.310	2.180	Roche Cobas E411
	ng/ml	5.25	3.95	6.55	
	nmol/l	1.580	1.190	1.980	Abbott Architect
	ng/ml	4.77	3.59	5.95	
	nmol/l	1.240	0.930	1.550	Siemens Centaur XP/XPT/Classic
	ng/ml	3.74	2.81	4.67	
	nmol/l	1.530	1.150	1.910	Tosoh Series
	ng/ml	4.62	3.47	5.77	
	nmol/l	1.500	1.130	1.880	ELISA
ng/ml	4.53	3.41	5.65		
nmol/l	1.770	1.330	2.210	SNIBE Maglumi Analysers	
ng/ml	5.34	4.02	6.66		
Carbamazepine	µmol/l	37.0	29.6	44.4	Abbott Architect
	µg/ml	8.75	7.00	10.5	
	µmol/l	40.8	28.6	53.0	Siemens Centaur XP/XPT/Classic
	µg/ml	9.65	6.76	12.5	
	µmol/l	35.2	28.2	42.2	Siemens Dimension
	µg/ml	8.32	6.67	9.97	
	µmol/l	31.7	25.4	38.0	Siemens Immulite 2000/2500
	µg/ml	7.49	6.00	8.98	
	µmol/l	34.1	27.3	40.9	Siemens Immulite 1000
	µg/ml	8.06	6.45	9.67	
µmol/l	37.4	29.9	44.9	Roche Integra	
µg/ml	8.84	7.07	10.6		
µmol/l	34.8	27.8	41.8	Vitros	
µg/ml	8.23	6.57	9.89		

## IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 1817EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods	
			low	high		
Carbamazepine	µmol/l	35.7	28.6	42.8	Roche Cobas E411	
	µg/ml	8.44	6.76	10.1		
	µmol/l	37.1	29.7	44.5	Roche Cobas 6000/8000	
	µg/ml	8.77	7.02	10.5		
	µmol/l	33.5	26.8	40.2	Beckman DxC	
	µg/ml	7.92	6.34	9.50		
	µmol/l	40.4	32.3	48.5	Beckman AU400/600/640/2700/5400	
	µg/ml	9.55	7.64	11.5		
	µmol/l	37.0	29.6	44.4	Siemens ADVIA 1200/1650/1800/2400	
	µg/ml	8.75	7.00	10.5		
	µmol/l	38.5	30.8	46.2	Gravimetric	
	µg/ml	9.10	7.28	10.9		
	Carcinoembryonic Antigen (CEA)	ng/ml = µg/l	26.1	20.9	31.3	Abbott Architect
		ng/ml = µg/l	23.6	18.9	28.3	BioMerieux Vidas
ng/ml = µg/l		25.9	17.6	34.2	Siemens Centaur XP/XPT/Classic	
ng/ml = µg/l		17.5	14.0	21.0	CIS RIA Coated tube	
ng/ml = µg/l		33.2	26.6	39.8	Siemens Immulite 2000/2500	
ng/ml = µg/l		33.4	26.7	40.1	Siemens Immulite 1000	
ng/ml = µg/l		21.7	17.4	26.0	Beckman DxI800	
ng/ml = µg/l		21.3	17.0	25.6	Roche Elecsys	
ng/ml = µg/l		21.5	17.2	25.8	Diasorin Liaison	
ng/ml = µg/l		21.8	17.4	26.2	Roche Modular E170	
ng/ml = µg/l		22.9	18.3	27.5	Beckman Access	
ng/ml = µg/l		33.0	26.4	39.6	Tosoh Series	
ng/ml = µg/l		27.6	22.1	33.1	Vitros ECI	
ng/ml = µg/l		21.5	17.2	25.8	Roche Cobas 6000/8000	
ng/ml = µg/l		21.7	17.4	26.0	Roche Cobas E411	
ng/ml = µg/l		22.5	18.0	27.0	SNIBE Maglumi Analysers	
ng/ml = µg/l	32.4	25.9	38.9	Fujirebio Lumipulse G Series		
ng/ml = µg/l	26.6	18.1	35.1	Siemens Centaur CP		
Cortisol	nmol/l	555	416	694	Abbott Architect	
	µg/dl	20.0	15.0	25.0		
	nmol/l	536	402	670	BioMerieux Vidas	
	µg/dl	19.3	14.5	24.1		
	nmol/l	716	494	938	Siemens Centaur XP/XPT/Classic	
	µg/dl	25.8	17.8	33.8		
	nmol/l	533	400	666	CIS RIA	
	µg/dl	19.2	14.4	24.0		
	nmol/l	647	485	809	Siemens Immulite 2000/2500	
	µg/dl	23.3	17.5	29.1		
	nmol/l	666	500	833	Siemens Immulite 1000	
	µg/dl	24.0	18.0	30.0		
	nmol/l	603	452	754	Beckman DxI800	
	µg/dl	21.7	16.3	27.1		
nmol/l	613	460	766	Roche Elecsys		
µg/dl	22.1	16.6	27.6			

## IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 1817EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Cortisol	nmol/l	655	491	819	Diasorin Liaison
	µg/dl	23.6	17.7	29.5	
	nmol/l	621	466	776	Roche Modular E170
	µg/dl	22.4	16.8	28.0	
	nmol/l	667	500	834	Beckman Access
	µg/dl	24.0	18.0	30.0	
	nmol/l	675	506	844	Tosoh Series
	µg/dl	24.3	18.2	30.4	
	nmol/l	588	441	735	Vitros ECI
	µg/dl	21.2	15.9	26.5	
	nmol/l	617	463	771	Roche Cobas 6000/8000
	µg/dl	22.2	16.7	27.7	
	nmol/l	644	483	805	Roche Cobas E411
	µg/dl	23.2	17.4	29.0	
	nmol/l	679	509	849	SNIBE Maglumi Analysers
	µg/dl	24.4	18.3	30.5	
	nmol/l	761	525	997	Siemens Centaur CP
	µg/dl	27.4	18.9	35.9	
nmol/l	608	456	760	Roche Modular E170 Gen II	
µg/dl	21.9	16.4	27.4		
nmol/l	658	494	823	Roche Cobas 4000/e411 Gen II	
µg/dl	23.7	17.8	29.6		
nmol/l	610	458	763	Roche Cobas 6000/8000 Gen II	
µg/dl	22.0	16.5	27.5		
nmol/l	641	481	801	Roche Elecsys Gen II	
µg/dl	23.1	17.3	28.9		
DHEA-S	µmol/l	13.6	10.9	16.3	Abbott Architect
	µmol/l	11.7	9.36	14.0	Siemens Immulite 2000/2500
	µmol/l	12.1	9.68	14.5	Siemens Immulite 1000
	µmol/l	11.2	8.96	13.4	Beckman Dxl800
	µmol/l	16.1	12.9	19.3	Roche Elecsys
	µmol/l	16.4	13.1	19.7	Roche Modular E170
	µmol/l	12.5	10.0	15.0	Beckman Access
	µmol/l	11.3	9.04	13.6	Diasorin Liaison
	µmol/l	11.5	7.48	15.5	Siemens Centaur XP/XPT/Classic
	µmol/l	15.9	12.7	19.1	Roche Cobas E411
	µmol/l	16.3	13.0	19.6	Roche Cobas 6000/8000
µmol/l	13.5	10.8	16.2	SNIBE Maglumi Analysers	
Digoxin	nmol/l	2.60	2.08	3.12	Abbott Architect
	ng/ml	2.03	1.62	2.44	
	nmol/l	2.81	2.25	3.37	BioMerieux Vidas
	ng/ml	2.19	1.76	2.62	
	nmol/l	3.37	2.59	4.15	Siemens Centaur XP/XPT/Classic
	ng/ml	2.63	2.03	3.23	
nmol/l	2.98	2.38	3.58	Siemens Dimension	
ng/ml	2.33	1.86	2.80		

## IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 1817EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Digoxin	nmol/l	3.57	2.86	4.28	Siemens Immulite 2000/2500
	ng/ml	2.79	2.23	3.35	
	nmol/l	3.12	2.50	3.74	Beckman Dxl800
	ng/ml	2.44	1.95	2.93	
	nmol/l	3.32	2.66	3.98	Roche Elecsys
	ng/ml	2.59	2.08	3.10	
	nmol/l	2.94	2.35	3.53	Roche Integra
	ng/ml	2.30	1.84	2.76	
	nmol/l	3.17	2.54	3.80	Beckman Access
	ng/ml	2.48	1.98	2.98	
	nmol/l	3.11	2.49	3.73	Vitros
	ng/ml	2.43	1.94	2.92	
	nmol/l	3.11	2.49	3.73	Roche Cobas 6000/8000
	ng/ml	2.43	1.94	2.92	
	nmol/l	2.60	2.08	3.12	Beckman DxC
	ng/ml	2.03	1.62	2.44	
	nmol/l	3.20	2.56	3.84	Beckman AU400/600/640/2700/5400
	ng/ml	2.50	2.00	3.00	
	nmol/l	3.02	2.42	3.62	Siemens ADVIA 1200/1650/1800/2400
	ng/ml	2.36	1.89	2.83	
nmol/l	3.51	2.81	4.21	SNIBE Maglumi Analysers	
ng/ml	2.74	2.19	3.29		
nmol/l	3.19	2.55	3.83	Roche Cobas 4000/E411	
ng/ml	2.49	1.99	2.99		
nmol/l	3.07	2.46	3.68	Gravimetric	
ng/ml	2.40	1.92	2.87		
Ethosuximide	µmol/l	360	288	432	Gravimetric
	µg/ml	51.0	40.8	61.3	
Ferritin	ng/ml = µg/l	118	94.4	142	Abbott Architect
	ng/ml = µg/l	91.2	73.0	109	BioMerieux Vidas
	ng/ml = µg/l	101	75.8	126	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	100	80.0	120	Siemens Dimension
	ng/ml = µg/l	102	81.6	122	Siemens Immulite 2000/2500
	ng/ml = µg/l	95.7	76.6	115	Siemens Immulite 1000
	ng/ml = µg/l	77.9	62.3	93.5	Beckman Dxl800
	ng/ml = µg/l	120	96.0	144	Roche Elecsys
	ng/ml = µg/l	101	80.8	121	Diasorin Liaison
	ng/ml = µg/l	118	94.4	142	Roche Modular E170
	ng/ml = µg/l	80.7	64.6	96.8	Beckman Access
	ng/ml = µg/l	78.8	63.0	94.6	Tosoh Series
	ng/ml = µg/l	73.1	58.5	87.7	Vitros ECi
	ng/ml = µg/l	108	86.4	130	Immunotech IRMA
	ng/ml = µg/l	116	92.8	139	Roche Cobas E411
	ng/ml = µg/l	94.2	75.4	113	Beckman AU400/600/640/2700/5400
ng/ml = µg/l	89.0	71.2	107	SNIBE Maglumi Analysers	

## IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 1817EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Ferritin	ng/ml = µg/l	63.7	51.0	76.4	Fujirebio Lumipulse G Series
	ng/ml = µg/l	95.9	71.9	120	Siemens Centaur CP
Folate	nmol/l	11.8	8.97	14.6	Abbott Architect
	ng/ml	5.20	3.96	6.44	
	nmol/l	27.5	17.9	37.1	Siemens Centaur XP/XPT/Classic (enhanced kit)
	ng/ml	12.1	7.87	16.3	
	nmol/l	10.2	7.75	12.6	Siemens Immulite 2000
	ng/ml	4.50	3.42	5.58	
	nmol/l	13.9	10.6	17.2	Beckman DxI800
	ng/ml	6.13	4.67	7.59	
	nmol/l	11.4	8.66	14.1	Roche Elecsys
	ng/ml	5.03	3.82	6.24	
	nmol/l	14.1	10.7	17.5	Beckman Access
	ng/ml	6.22	4.72	7.72	
	nmol/l	20.9	15.9	25.9	Tosoh Series
	ng/ml	9.22	7.01	11.4	
	nmol/l	8.96	6.81	11.1	Vitros ECI
	ng/ml	3.95	3.00	4.90	
	nmol/l	10.6	8.06	13.1	MP Biomedicals RIA
	ng/ml	4.67	3.55	5.79	
	nmol/l	12.2	9.27	15.1	Roche Cobas E411
	ng/ml	5.38	4.09	6.67	
nmol/l	12.3	9.35	15.3	Roche Cobas 6000/8000	
ng/ml	5.42	4.12	6.72		
nmol/l	8.43	6.41	10.5	Siemens Dimension	
ng/ml	3.72	2.83	4.61		
nmol/l	30.8	20.0	41.6	Siemens Centaur CP (enhanced kit)	
ng/ml	13.6	8.84	18.4		
nmol/l	12.3	9.35	15.3	Roche Cobas 6000/8000 Folate III	
ng/ml	5.42	4.12	6.72		
nmol/l	11.4	8.66	14.1	Roche Cobas 4000/e411 Folate III	
ng/ml	5.03	3.82	6.24		
Free T3	pmol/l	12.1	9.08	15.1	Abbott Architect
	ng/dl	0.787	0.590	0.984	
	pg/ml	7.88	5.91	9.85	
	pmol/l	13.9	10.4	17.4	BioMerieux Vidas
	ng/dl	0.904	0.676	1.13	
	pg/ml	9.05	6.77	11.3	
	pmol/l	13.6	8.16	19.0	Siemens Centaur XP/XPT/Classic
	ng/dl	0.884	0.530	1.24	
	pg/ml	8.85	5.31	12.4	
	pmol/l	9.53	7.15	11.9	Siemens Immulite 2000/2500
	ng/dl	0.619	0.465	0.773	
	pg/ml	6.20	4.65	7.75	
	pmol/l	9.49	7.12	11.9	Siemens Immulite 1000
	ng/dl	0.617	0.463	0.771	
pg/ml	6.18	4.64	7.72		

## IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 1817EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Free T3	pmol/l	10.0	7.50	12.5	Beckman DxI800
	ng/dl	0.650	0.488	0.812	
	pg/ml	6.51	4.88	8.14	
	pmol/l	15.8	11.9	19.8	Roche Elecsys
	ng/dl	1.03	0.774	1.29	
	pg/ml	10.3	7.75	12.9	
	pmol/l	18.0	13.5	22.5	Diasorin Liaison
	ng/dl	1.17	0.878	1.46	
	pg/ml	11.7	8.79	14.6	
	pmol/l	15.6	11.7	19.5	Roche Modular E170
	ng/dl	1.01	0.761	1.26	
	pg/ml	10.2	7.62	12.8	
	pmol/l	11.2	8.40	14.0	Beckman Access
	ng/dl	0.728	0.546	0.910	
	pg/ml	7.29	5.47	9.11	
	pmol/l	17.2	12.9	21.5	Tosoh Series
	ng/dl	1.12	0.839	1.40	
	pg/ml	11.2	8.40	14.0	
	pmol/l	31.6	23.7	39.5	Vitros ECI
	ng/dl	2.05	1.54	2.56	
	pg/ml	20.6	15.4	25.8	
	pmol/l	15.8	11.9	19.8	Roche Cobas E411
	ng/dl	1.03	0.774	1.29	
	pg/ml	10.3	7.75	12.9	
pmol/l	15.9	11.9	19.9	Roche Cobas 6000/8000	
ng/dl	1.03	0.774	1.29		
pg/ml	10.4	7.75	13.1		
pmol/l	16.4	12.3	20.5	Siemens Dimension	
ng/dl	1.07	0.800	1.34		
pg/ml	10.7	8.01	13.4		
pmol/l	16.2	12.2	20.3	Siemens Dimension Vista LOCI	
ng/dl	1.05	0.793	1.31		
pg/ml	10.5	7.94	13.1		
pmol/l	13.0	9.75	16.3	SNIBE Maglumi Analysers	
ng/dl	0.845	0.634	1.06		
pg/ml	8.46	6.35	10.6		
pmol/l	12.8	7.68	17.9	Siemens Centaur CP	
ng/dl	0.832	0.499	1.17		
pg/ml	8.33	5.00	11.7		
Free T4	pmol/l	29.9	22.4	37.4	Abbott Architect
	ng/dl	2.33	1.75	2.91	
	pg/ml	23.3	17.5	29.1	
	pmol/l	32.2	24.2	40.2	Siemens Centaur XP/XPT/Classic
	ng/dl	2.51	1.88	3.14	
	pg/ml	25.1	18.8	31.4	

## IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 1817EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Free T4	pmol/l	44.6	33.5	55.8	CIS RIA Coated tube
	ng/dl	3.48	2.61	4.35	
	pg/ml	34.8	26.1	43.5	
	pmol/l	35.7	26.8	44.6	Siemens Dimension
	ng/dl	2.78	2.09	3.47	
	pg/ml	27.8	20.9	34.7	
	pmol/l	43.8	32.9	54.8	Siemens Immulite 2000/2500
	ng/dl	3.42	2.57	4.27	
	pg/ml	34.2	25.7	42.7	
	pmol/l	45.5	34.1	56.9	Siemens Immulite 1000
	ng/dl	3.55	2.66	4.44	
	pg/ml	35.5	26.6	44.4	
	pmol/l	35.1	26.3	43.9	Beckman Dxl800
	ng/dl	2.74	2.05	3.43	
	pg/ml	27.4	20.5	34.3	
	pmol/l	42.9	32.2	53.6	Roche Elecsys
	ng/dl	3.35	2.51	4.19	
	pg/ml	33.5	25.1	41.9	
	pmol/l	53.6	40.2	67.0	Diasorin Liaison
	ng/dl	4.18	3.14	5.22	
	pg/ml	41.8	31.4	52.2	
	pmol/l	39.4	29.6	49.3	Roche Modular E170
	ng/dl	3.07	2.31	3.83	
	pg/ml	30.7	23.1	38.3	
	pmol/l	34.8	26.1	43.5	Beckman Access
	ng/dl	2.71	2.04	3.38	
	pg/ml	27.1	20.4	33.8	
	pmol/l	43.1	32.3	53.9	Tosoh Series
	ng/dl	3.36	2.52	4.20	
	pg/ml	33.6	25.2	42.0	
pmol/l	79.3	59.5	99.0	Vitros ECi	
ng/dl	6.19	4.64	7.74		
pg/ml	61.9	46.4	77.4		
pmol/l	41.5	31.1	51.9	Roche Cobas 6000/8000	
ng/dl	3.24	2.43	4.05		
pg/ml	32.4	24.3	40.5		
pmol/l	37.2	27.9	46.5	Immunotech IRMA	
ng/dl	2.90	2.18	3.62		
pg/ml	29.0	21.8	36.2		
pmol/l	42.6	32.0	53.3	Roche Cobas E411	
ng/dl	3.32	2.50	4.14		
pg/ml	33.2	25.0	41.4		
pmol/l	30.0	22.5	37.5	ELISA	
ng/dl	2.34	1.76	2.92		
pg/ml	23.4	17.6	29.2		
pmol/l	36.4	27.3	45.5	Siemens Dimension Vista LOCI	
ng/dl	2.84	2.13	3.55		
pg/ml	28.4	21.3	35.5		



## IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 1817EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods	
			low	high		
Free T4	pmol/l	45.0	33.8	56.3	SNIBE Maglumi Analysers	
	ng/dl	3.51	2.64	4.38		
	pg/ml	35.1	26.4	43.8		
	pmol/l	47.2	35.4	59.0	Biomerieux Vidas FT4N Kit	
	ng/dl	3.68	2.76	4.60		
	pg/ml	36.8	27.6	46.0		
	pmol/l	34.1	25.6	42.6	Siemens Centaur CP	
	ng/dl	2.66	2.00	3.32		
	pg/ml	26.6	20.0	33.2		
	FSH	mU/ml	21.8	17.4	26.2	Abbott Architect
		mU/ml	30.7	24.6	36.8	BioMerieux Vidas
		mU/ml	33.0	24.8	41.2	Siemens Centaur XP/XPT/Classic
mU/ml		27.0	21.6	32.4	Siemens Immulite 2000/2500	
mU/ml		25.7	20.6	30.8	Siemens Immulite 1000	
mU/ml		26.8	21.4	32.2	Beckman DxI800	
mU/ml		24.8	19.8	29.8	Roche/BM Elecsys	
mU/ml		29.9	23.9	35.9	Diasorin Liaison	
mU/ml		23.9	19.1	28.7	Roche Modular E170	
mU/ml		26.9	21.5	32.3	Beckman Access	
mU/ml		24.9	19.9	29.9	Tosoh Series	
mU/ml		20.0	16.0	24.0	Vitros ECi	
mU/ml		25.0	20.0	30.0	Roche Cobas E411	
mU/ml		23.9	19.1	28.7	Roche Cobas 6000/8000	
mU/ml		29.0	23.2	34.8	SNIBE Maglumi Analysers	
mU/ml	21.0	16.8	25.2	Fujirebio Lumipulse G Series		
mU/ml	28.8	21.6	36.0	Siemens Centaur CP		
Gentamicin	µmol/l	7.04	5.63	8.45	Roche Integra	
	µg/ml	3.37	2.69	4.05		
	µmol/l	8.70	6.18	11.2	Siemens Centaur XP/XPT/Classic	
	µg/ml	4.16	2.95	5.37		
	µmol/l	7.21	5.77	8.65	Siemens Dimension Vista	
	µg/ml	3.45	2.76	4.14		
	µmol/l	5.54	4.43	6.65	Roche Cobas 6000/8000	
	µg/ml	2.65	2.12	3.18		
µmol/l	8.65	6.92	10.4	Beckman DxC		
µg/ml	4.13	3.31	4.95			
Growth Hormone (GH)	µU/ml	8.16	6.53	9.79	Gravimetric	
	µg/ml	3.90	3.12	4.68		
	µU/ml	17.5	14.0	21.0	Siemens Immulite 2000/2500	
		ng/ml	5.83	4.66		7.00
	µU/ml	15.7	12.6	18.8	Siemens Immulite 1000	
		ng/ml	5.23	4.20		6.26
	µU/ml	13.3	10.6	16.0	Beckman DxI800	
		ng/ml	4.43	3.53		5.33

## IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 1817EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Growth Hormone (GH)	µU/ml	13.7	11.0	16.4	Beckman Access
	ng/ml	4.56	3.66	5.46	
	µU/ml	16.3	13.0	19.6	Tosoh Series
	ng/ml	5.43	4.33	6.53	
	µU/ml	15.0	12.0	18.0	Diasorin Liaison
	ng/ml	5.00	4.00	6.00	
	µU/ml	17.5	14.0	21.0	Roche Cobas E411
	ng/ml	5.83	4.66	7.00	
	µU/ml	21.8	17.4	26.2	SNIBE Maglumi Analysers
	ng/ml	7.26	5.79	8.73	
	µU/ml	17.6	14.1	21.1	Roche Cobas 6000/8000
	ng/ml	5.86	4.70	7.02	
	µU/ml	14.7	11.8	17.6	IDS iSYS
	ng/ml	4.90	3.93	5.87	
Immunoglobulin E	KIU/I = IU/ml	106	84.8	127	Abbott Architect
	KIU/I = IU/ml	96.4	77.1	116	BioMerieux Vidas
	KIU/I = IU/ml	113	67.8	158	Siemens Centaur XP/XPT/Classic
	KIU/I = IU/ml	119	95.2	143	Siemens Immulite 2000/2500
	KIU/I = IU/ml	123	98.4	148	Siemens Immulite 1000
	KIU/I = IU/ml	106	84.8	127	Beckman Dxl800
	KIU/I = IU/ml	133	106	160	Roche Elecsys
	KIU/I = IU/ml	116	92.8	139	Pharmacia Unicap
	KIU/I = IU/ml	125	100	150	Roche Modular E170
	KIU/I = IU/ml	116	92.8	139	Tosoh Series
	KIU/I = IU/ml	128	102	154	Roche Cobas E411
	KIU/I = IU/ml	128	102	154	Roche Cobas 6000/8000
	KIU/I = IU/ml	106	84.8	127	SNIBE Maglumi Analysers
	KIU/I = IU/ml	107	85.6	128	Fujirebio Lumipulse G Series
	KIU/I = IU/ml	112	67.2	157	Siemens Centaur CP
Insulin	mU/l	21.1	15.8	26.4	Siemens Centaur XP/XPT/Classic
	µU/ml	21.1	15.8	26.4	
	mU/l	6.86	5.15	8.58	Siemens Immulite 1000
	µU/ml	6.86	5.15	8.57	
	mU/l	22.3	16.7	27.9	Roche Modular E170
	µU/ml	22.3	16.7	27.9	
	mU/l	8.36	6.27	10.5	Siemens Immulite 2000
	µU/ml	8.36	6.27	10.5	
	mU/l	21.6	16.2	27.0	Roche Elecsys
	µU/ml	21.6	16.2	27.0	
	mU/l	16.4	12.3	20.5	Beckman Access
	µU/ml	16.4	12.3	20.5	
	mU/l	18.6	14.0	23.3	Abbott Architect
	µU/ml	18.6	14.0	23.2	
	mU/l	21.6	16.2	27.0	Tosoh Series
	µU/ml	21.6	16.2	27.0	
	mU/l	22.0	16.5	27.5	Roche Cobas E411
µU/ml	22.0	16.5	27.5		

## IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 1817EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Insulin	mU/l	16.5	12.4	20.6	Beckman Dxl 600/800
	µU/ml	16.5	12.4	20.6	
	mU/l	25.5	19.1	31.9	Diasorin Liaison
	µU/ml	25.5	19.1	31.9	
	mU/l	22.2	16.7	27.8	Roche Cobas 6000/8000
	µU/ml	22.2	16.7	27.7	
	mU/l	19.3	14.5	24.1	SNIBE Maglumi Analysers
	µU/ml	19.3	14.5	24.1	
Luteinising Hormone (LH)	mU/ml	20.0	16.0	24.0	Abbott Architect
	mU/ml	22.6	18.1	27.1	BioMerieux Vidas
	mU/ml	24.4	18.8	30.0	Siemens Centaur XP/XPT/Classic
	mU/ml	35.7	28.6	42.8	Siemens Immulite 2000
	mU/ml	37.8	30.2	45.4	Siemens Immulite 1000
	mU/ml	17.2	13.8	20.6	Beckman Dxl800
	mU/ml	26.1	20.9	31.3	Roche Elecsys
	mU/ml	28.1	22.5	33.7	Diasorin Liaison
	mU/ml	26.0	20.8	31.2	Roche Modular E170
	mU/ml	17.6	14.1	21.1	Beckman Access
	mU/ml	22.4	17.9	26.9	Tosoh Series
	mU/ml	34.5	27.6	41.4	Vitros ECi
	mU/ml	25.8	20.6	31.0	Roche Cobas E411
	mU/ml	25.9	20.7	31.1	Roche Cobas 6000/8000
	mU/ml	24.2	19.4	29.0	SNIBE Maglumi Analysers
	mU/ml	22.2	17.8	26.6	Fujirebio Lumipulse G Series
mU/ml	26.2	20.2	32.2	Siemens Centaur CP	
Oestradiol	pmol/l	746	597	895	Abbott Architect
	pg/ml	203	162	244	
	pmol/l	1130	904	1356	BioMerieux Vidas
	pg/ml	307	246	368	
	pmol/l	1013	608	1418	Siemens Centaur XP/XPT/Classic
	pg/ml	276	166	386	
	pmol/l	997	798	1196	Siemens Immulite 2000/2500
	pg/ml	271	217	325	
	pmol/l	1091	873	1309	Siemens Immulite 1000
	pg/ml	297	237	357	
	pmol/l	1061	849	1273	Beckman Dxl800
	pg/ml	289	231	347	
	pmol/l	774	619	929	Roche Elecsys (Estradiol II)
	pg/ml	211	168	254	
pmol/l	1124	899	1349	Beckman Access	
pg/ml	306	245	367		

## IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 1817EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Oestradiol	pmol/l	856	685	1027	Tosoh (E2)
	pg/ml	233	186	280	
	pmol/l	960	768	1152	Vitros ECI
	pg/ml	261	209	313	
	pmol/l	793	634	952	Roche Cobas 6000/8000 (Estradiol II)
	pg/ml	216	172	260	
	pmol/l	772	618	926	Roche Cobas 4000/E411 (Estradiol II)
	pg/ml	210	168	252	
	pmol/l	1026	616	1436	Siemens Centaur XP/XPT/Classic Enhanced (eE2)
	pg/ml	279	167	391	
	pmol/l	986	592	1380	Siemens Centaur XP/XPT/Classic E26 III
	pg/ml	268	161	375	
	pmol/l	1323	1058	1588	SNIBE Maglumi Analysers
	pg/ml	360	288	432	
	pmol/l	789	631	947	Tosoh (iE2-hsE2)
	pg/ml	215	172	258	
	pmol/l	1055	633	1477	Siemens Centaur CP
	pg/ml	287	172	402	
	pmol/l	1088	653	1523	Siemens Centaur CP Enhanced (eE2)
	pg/ml	296	178	414	
pmol/l	900	720	1080	Fujirebio Lumipulse G Series	
pg/ml	245	196	294		
pmol/l	798	638	958	Roche Cobas 6000/8000 (Estradiol III)	
pg/ml	217	174	260		
pmol/l	753	602	904	Roche Elecsys (Estradiol III)	
pg/ml	205	164	246		
pmol/l	783	626	940	Roche Cobas 4000/E411 (Estradiol III)	
pg/ml	213	170	256		
pmol/l	787	630	944	Roche Modular E170 (Estradiol III)	
pg/ml	214	171	257		
Paracetamol	mmol/l	0.325	0.260	0.390	Abbott Architect
	mg/l	49.2	39.3	59.1	
	mmol/l	0.301	0.241	0.361	Roche Cobas 6000/8000
	mg/l	45.5	36.5	54.5	
mmol/l	0.348	0.280	0.420	Gravimetric	
mg/l	52.7	42.4	63.5		
Phenobarbital	µmol/l	80.7	64.6	96.8	Abbott Architect
	µg/ml	18.7	15.0	22.4	
	µmol/l	76.6	61.3	91.9	Siemens ADVIA 1200/1650/1800/2400
	µg/ml	17.8	14.2	21.4	
	µmol/l	74.2	59.4	89.0	Roche Cobas 6000/8000
	µg/ml	17.2	13.8	20.6	
	µmol/l	76.6	61.3	91.9	Siemens Immulite 2000/2500
	µg/ml	17.8	14.2	21.4	
µmol/l	78.9	63.1	94.7	Beckman AU400/600/640/2700/5400	
µg/ml	18.3	14.6	22.0		

## IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 1817EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods	
			low	high		
Phenobarbital	µmol/l	95.9	69.0	123	Siemens Centaur XP/XPT/Classic	
	µg/ml	22.2	16.0	28.4		
	µmol/l	73.2	58.6	87.8	Roche Integra	
	µg/ml	17.0	13.6	20.4		
	µmol/l	78.0	62.4	93.6	Siemens Immulite 1000	
	µg/ml	18.1	14.5	21.7		
	µmol/l	81.6	65.3	97.9	Beckman DxC	
	µg/ml	18.9	15.1	22.7		
	µmol/l	77.6	62.1	93.1	Gravimetric	
	µg/ml	18.0	14.4	21.6		
	Phenytoin	µmol/l	65.5	52.4	78.6	Abbott Architect
		µg/ml	16.5	13.2	19.8	
µmol/l		82.2	64.1	100	Siemens Centaur XP/XPT/Classic	
µg/ml		20.8	16.2	25.4		
µmol/l		71.5	57.2	85.8	Siemens Dimension	
µg/ml		18.1	14.4	21.8		
µmol/l		57.9	46.3	69.5	Siemens Immulite 2000/2500	
µg/ml		14.6	11.7	17.5		
µmol/l		64.9	51.9	77.9	Siemens Immulite 1000	
µg/ml		16.4	13.1	19.7		
µmol/l		64.6	51.7	77.5	Roche Integra	
µg/ml		16.3	13.1	19.5		
µmol/l		69.5	55.6	83.4	Vitros	
µg/ml		17.5	14.0	21.0		
µmol/l		60.9	48.7	73.1	Roche Cobas E411	
µg/ml		15.4	12.3	18.5		
µmol/l		64.7	51.8	77.6	Roche Cobas 6000/8000	
µg/ml		16.3	13.1	19.5		
µmol/l		67.0	53.6	80.4	Beckman DxC	
µg/ml		16.9	13.5	20.3		
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	4.91	3.93	5.89		
Progesterone	nmol/l	28.3	22.6	34.0	Abbott Architect	
	ng/ml	8.86	7.07	10.7		
	nmol/l	42.8	34.2	51.4	BioMerieux Vidas	
	ng/ml	13.4	10.7	16.1		
	nmol/l	24.0	16.8	31.2	Siemens Centaur XP/XPT/Classic	
	ng/ml	7.51	5.26	9.76		
	nmol/l	25.9	20.7	31.1	Siemens Immulite 2000/2500	
	ng/ml	8.11	6.48	9.74		
	nmol/l	29.3	23.4	35.2	Siemens Immulite 1000	
	ng/ml	9.17	7.32	11.0		
	nmol/l	33.3	26.6	40.0	Beckman Dxl Prog Cal 33555	
	ng/ml	10.4	8.33	12.5		

## IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 1817EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Progesterone	nmol/l	32.8	26.2	39.4	Roche Elecsys (Prog. II)
	ng/ml	10.3	8.20	12.4	
	nmol/l	34.2	27.4	41.0	Beckman Access Prog Cal 33555
	ng/ml	10.7	8.58	12.8	
	nmol/l	39.1	31.3	46.9	Tosoh Series
	ng/ml	12.2	9.80	14.6	
	nmol/l	39.7	31.8	47.6	Vitros ECI
	ng/ml	12.4	9.95	14.9	
	nmol/l	33.6	26.9	40.3	Roche Cobas 4000/e411 (Prog. II)
	ng/ml	10.5	8.42	12.6	
	nmol/l	34.6	27.7	41.5	Roche Cobas 6000/8000 (Prog. II)
	ng/ml	10.8	8.67	12.9	
	nmol/l	27.7	22.2	33.2	Diasorin Liaison
	ng/ml	8.67	6.95	10.4	
	nmol/l	35.3	28.2	42.4	SNIBE Maglumi Analysers
	ng/ml	11.0	8.83	13.2	
	nmol/l	29.7	23.8	35.6	Beckman Dxl Prog DE Cal A80773
	ng/ml	9.30	7.45	11.2	
	nmol/l	25.8	18.1	33.5	Siemens Centaur CP
	ng/ml	8.08	5.66	10.5	
nmol/l	34.0	27.2	40.8	Roche Cobas 6000/8000 (Prog. III)	
ng/ml	10.6	8.51	12.7		
nmol/l	33.6	26.9	40.3	Roche Elecsys (Prog. III)	
ng/ml	10.5	8.42	12.6		
nmol/l	33.8	27.0	40.6	Roche Cobas 4000/e411 (Prog. III)	
ng/ml	10.6	8.45	12.8		
nmol/l	33.6	26.9	40.3	Roche Modular E170 (Prog. III)	
ng/ml	10.5	8.42	12.6		
Prolactin	µU/ml	723	578	868	Abbott Architect
	µU/ml	828	662	994	BioMerieux Vidas
	µU/ml	643	502	784	Siemens Centaur XP/XPT/Classic
	µU/ml	647	518	776	Siemens Immulite 2000/2500
	µU/ml	681	545	817	Siemens Immulite 1000
	µU/ml	627	502	752	Beckman Dxl800
	µU/ml	809	647	971	Roche Elecsys
	µU/ml	803	642	964	Diasorin Liaison
	µU/ml	769	615	923	Roche Modular E170
	µU/ml	644	515	773	Beckman Access
	µU/ml	782	626	938	Tosoh Series
	µU/ml	656	525	787	Vitros ECI
	µU/ml	778	622	934	Roche Elecsys/E170/Cobas 6000/8000 PRLII
	µU/ml	743	594	892	Immunotech IRMA
	µU/ml	808	646	970	Roche Cobas E411
	µU/ml	782	626	938	Roche Cobas 6000/8000
	µU/ml	762	610	914	SNIBE Maglumi Analysers
	µU/ml	872	698	1046	Fujirebio Lumipulse G Series

## IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 1817EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Prolactin	µU/ml	707	566	848	Abbott Architect restandardised
	µU/ml	646	504	788	Siemens Centaur CP
PSA Free	ng/ml = µg/l	11.0	8.25	13.8	Abbott Architect
	ng/ml = µg/l	13.1	9.83	16.4	BioMerieux Vidas
	ng/ml = µg/l	12.5	9.38	15.6	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	8.46	6.35	10.6	Siemens Dimension
	ng/ml = µg/l	10.3	7.73	12.9	Siemens Immulite 2000/2500
	ng/ml = µg/l	9.46	7.10	11.8	Siemens Immulite 1000
	ng/ml = µg/l	14.2	10.7	17.8	Beckman DXI standardised to Hybritech
	ng/ml = µg/l	11.6	8.70	14.5	Roche Elecsys
	ng/ml = µg/l	3.27	2.45	4.09	Diasorin Liaison
	ng/ml = µg/l	11.6	8.70	14.5	Roche Modular E170
	ng/ml = µg/l	14.4	10.8	18.0	Beckman Access standardised to Hybritech
	ng/ml = µg/l	10.3	7.73	12.9	Tosoh Series
	ng/ml = µg/l	11.7	8.78	14.6	Roche Cobas E411
	ng/ml = µg/l	11.2	8.40	14.0	Roche Cobas 6000/8000
	ng/ml = µg/l	11.6	8.70	14.5	Beckman DxI800 standardised to WHO IRP96/670
	ng/ml = µg/l	9.79	7.34	12.2	SNIBE Maglumi Analysers
ng/ml = µg/l	10.5	7.88	13.1	Ortho Vitros 3600/5600/ECi PSA II	
ng/ml = µg/l	8.39	6.29	10.5	Fujirebio Lumipulse G Series	
PSA Total	ng/ml = µg/l	12.7	9.53	15.9	Abbott Architect
	ng/ml = µg/l	13.1	9.83	16.4	BioMerieux Vidas
	ng/ml = µg/l	13.4	10.1	16.8	bioMerieux VIDAS TPSA
	ng/ml = µg/l	12.4	9.30	15.5	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	12.5	9.38	15.6	Siemens Immulite 2000/2500 1st generation
	ng/ml = µg/l	11.3	8.48	14.1	Siemens Immulite 1000 1st generation
	ng/ml = µg/l	13.1	9.83	16.4	Beckman DxI standardised to Hybritech
	ng/ml = µg/l	11.5	8.63	14.4	Beckman DxI800 standardised to WHO IRP96/670
	ng/ml = µg/l	15.0	11.3	18.8	Roche Elecsys
	ng/ml = µg/l	4.25	3.19	5.31	Diasorin Liaison
	ng/ml = µg/l	15.0	11.3	18.8	Roche Modular E170
	ng/ml = µg/l	13.4	10.1	16.8	Beckman Access standardised to Hybritech
	ng/ml = µg/l	12.9	9.68	16.1	Beckman Access standardised to WHO IRP96/670
	ng/ml = µg/l	8.45	6.34	10.6	Tosoh Series
	ng/ml = µg/l	14.6	11.0	18.3	Vitros ECi
	ng/ml = µg/l	12.2	9.15	15.3	CIS RIA Coated tube
	ng/ml = µg/l	15.4	11.6	19.3	Roche Cobas E411
	ng/ml = µg/l	15.2	11.4	19.0	Roche Cobas 6000/8000
	ng/ml = µg/l	16.3	12.2	20.4	SNIBE Maglumi Analysers
	ng/ml = µg/l	11.1	8.33	13.9	Fujirebio Lumipulse G Series
ng/ml = µg/l	15.2	11.4	19.0	Ortho Vitros 3600/5600/ECi PSA II	
ng/ml = µg/l	12.3	9.23	15.4	Siemens Centaur CP	
Salicylic Acid	mmol/l	1.13	0.904	1.36	Roche Integra
	mg/dl	15.6	12.5	18.7	
	mmol/l	1.19	0.952	1.43	Abbott Architect
	mg/dl	16.4	13.1	19.7	

## IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 1817EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Salicylic Acid	mmol/l	1.23	0.984	1.48	Beckman DxC
	mg/dl	17.0	13.6	20.4	
	mmol/l	1.22	0.980	1.46	Gravimetric
	mg/dl	16.9	13.5	20.2	
SHBG	nmol/l	20.8	16.6	25.0	Siemens Immulite 1000
	nmol/l	24.3	19.4	29.2	Siemens Immulite 2000/2500
	nmol/l	25.4	20.3	30.5	Roche Modular E170
	nmol/l	23.7	19.0	28.4	Abbott Architect
	nmol/l	26.8	21.4	32.2	Roche Cobas E411
	nmol/l	26.1	20.9	31.3	Roche Cobas 6000/8000
	nmol/l	22.9	18.3	27.5	Beckman Dxl800
	nmol/l	21.9	17.5	26.3	SNIBE Maglumi Analysers
T Uptake	%U	34.4	28.2	40.6	Siemens Immulite 2000
Testosterone	nmol/l	19.4	15.5	23.3	Abbott Architect
	ng/ml	5.59	4.46	6.72	
	ng/dl	559	446	672	
	nmol/l	15.9	12.7	19.1	BioMerieux Vidas
	ng/ml	4.58	3.66	5.50	
	ng/dl	458	366	550	
	nmol/l	17.6	12.3	22.9	Siemens Centaur XP/XPT/Classic
	ng/ml	5.07	3.55	6.59	
	ng/dl	507	355	659	
	nmol/l	19.7	15.8	23.6	CIS RIA Coated tube
	ng/ml	5.67	4.55	6.79	
	ng/dl	567	455	679	
	nmol/l	23.2	18.6	27.8	Siemens Immulite 2000/2500
	ng/ml	6.68	5.36	8.00	
	ng/dl	668	536	800	
	nmol/l	26.7	21.4	32.0	Siemens Immulite 1000
	ng/ml	7.69	6.16	9.22	
	ng/dl	769	616	922	
	nmol/l	17.7	14.2	21.2	Beckman Dxl800
	ng/ml	5.10	4.09	6.11	
ng/dl	510	409	611		
nmol/l	19.0	15.2	22.8	Beckman Access	
ng/ml	5.47	4.38	6.56		
ng/dl	547	438	656		
nmol/l	27.6	22.1	33.1	Tosoh Series	
ng/ml	7.95	6.36	9.54		
ng/dl	795	636	954		
nmol/l	25.0	20.0	30.0	Vitros ECi	
ng/ml	7.20	5.76	8.64		
ng/dl	720	576	864		
nmol/l	20.7	16.6	24.8	Roche Cobas 6000 Test 2	
ng/ml	5.96	4.78	7.14		
ng/dl	596	478	714		



## IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 1817EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods	
			low	high		
Testosterone	nmol/l	19.7	15.8	23.6	Roche Elecsys Test II	
	ng/ml	5.67	4.55	6.79		
	ng/dl	567	455	679		
	nmol/l	20.7	16.6	24.8	Roche Modular E170 Test II	
	ng/ml	5.96	4.78	7.14		
	ng/dl	596	478	714		
	nmol/l	20.3	16.2	24.4	Roche Cobas 4000/e411 Test II	
	ng/ml	5.85	4.67	7.03		
	ng/dl	585	467	703		
	nmol/l	21.9	17.5	26.3	SNIBE Maglumi Analysers	
	ng/ml	6.31	5.04	7.58		
	ng/dl	631	504	758		
	nmol/l	19.8	15.8	23.8	Abbott Architect 2nd Generation	
	ng/ml	5.70	4.55	6.85		
	ng/dl	570	455	685		
	nmol/l	17.3	12.1	22.5	Siemens Centaur CP	
	ng/ml	4.98	3.49	6.47		
	ng/dl	498	349	647		
Theophylline	nmol/l	15.9	12.7	19.1	BioMerieux Vidas Testosterone II	
	ng/ml	4.58	3.66	5.50		
	ng/dl	458	366	550		
	nmol/l	19.0	13.3	24.7	Siemens Centaur TST II	
	ng/ml	5.47	3.83	7.11		
	ng/dl	547	383	711		
	Theophylline	µmol/l	75.0	60.0	90.0	Siemens Centaur XP/XPT/Classic
		µg/ml	13.5	10.8	16.2	
		µmol/l	81.8	65.4	98.2	Siemens Dimension
		µg/ml	14.7	11.8	17.6	
		µmol/l	81.5	65.2	97.8	Roche Integra
		µg/ml	14.7	11.7	17.7	
		µmol/l	73.4	58.7	88.1	Abbott Architect
		µg/ml	13.2	10.6	15.8	
		µmol/l	77.7	62.2	93.2	Roche Cobas 6000/8000
		µg/ml	14.0	11.2	16.8	
		µmol/l	76.0	60.8	91.2	Beckman DxC
		µg/ml	13.7	11.0	16.4	
µmol/l		72.7	58.2	87.2	Beckman AU400/600/640/2700/5400	
µg/ml		13.1	10.5	15.7		
µmol/l		83.8	67.0	101	Gravimetric	
µg/ml		15.1	12.1	18.2		
Thyroglobulin		ng/ml	20.3	15.2	25.4	Siemens Immulite 1000
		ng/ml	19.1	14.3	23.9	Siemens Immulite 2000
	ng/ml	33.4	25.1	41.8	Roche Elecsys	
	ng/ml	29.9	22.4	37.4	Beckman Dxl800	
	ng/ml	33.3	25.0	41.6	Roche Cobas E411	
	ng/ml	11.0	8.25	13.8	Diesse Chorus	

## IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 1817EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Thyroglobulin	ng/ml	32.2	24.2	40.3	Roche Cobas 6000/8000
	ng/ml	31.5	23.6	39.4	Beckman Access
	ng/ml	15.8	11.9	19.8	SNIBE Maglumi Analysers
	ng/ml	34.6	26.0	43.3	Tosoh Series
	ng/ml	32.2	24.2	40.3	Roche Cobas 6000 TGII
	ng/ml	32.7	24.5	40.9	Roche Elecsys TGII
	ng/ml	32.3	24.2	40.4	Roche Cobas 4000/E411 TGII
	ng/ml	32.3	24.2	40.4	Roche Modular E170 TGII
Thyroid Stimulating Hormone	µU/ml = mIU/l	1.99	1.59	2.39	Abbott Architect
	µU/ml = mIU/l	2.43	1.94	2.92	bioMerieux VIDAS TSH
	µU/ml = mIU/l	2.33	1.86	2.80	bioMerieux VIDAS TSH3 Ultrasensitive
	µU/ml = mIU/l	2.37	1.61	3.13	Siemens Centaur XP/XPT/Classic
	µU/ml = mIU/l	2.88	2.30	3.46	CIS IRMA
	µU/ml = mIU/l	2.62	1.78	3.46	Siemens Centaur XP/XPT/Classic 3rd Generation
	µU/ml = mIU/l	2.35	1.88	2.82	Siemens Immulite 2000/2500
	µU/ml = mIU/l	2.25	1.80	2.70	Siemens Immulite 1000
	µU/ml = mIU/l	2.07	1.66	2.48	Beckman Dxl800 Fast TSH
	µU/ml = mIU/l	2.04	1.63	2.45	Beckman Dxl800
	µU/ml = mIU/l	2.51	2.01	3.01	Roche Elecsys
	µU/ml = mIU/l	2.77	2.22	3.32	Diasorin Liaison
	µU/ml = mIU/l	2.46	1.97	2.95	Roche Modular E170
	µU/ml = mIU/l	2.04	1.63	2.45	Beckman Access Fast TSH
	µU/ml = mIU/l	2.14	1.71	2.57	Beckman Access hyperTSH 3rd Generation
	µU/ml = mIU/l	2.43	1.94	2.92	Tosoh Series
	µU/ml = mIU/l	2.73	2.18	3.28	Vitros ECi
	µU/ml = mIU/l	2.47	1.98	2.96	Roche Cobas E411
	µU/ml = mIU/l	2.51	2.01	3.01	Roche Cobas 6000/8000
	µU/ml = mIU/l	2.11	1.69	2.53	Beckman Dxl800 Hyper TSH
µU/ml = mIU/l	2.04	1.63	2.45	Siemens Dimension Vista LOCI	
µU/ml = mIU/l	2.52	2.02	3.02	SNIBE Maglumi Analysers	
µU/ml = mIU/l	2.28	1.55	3.01	Siemens Centaur XP/XPT/Classic TSH3-Ultra	
µU/ml = mIU/l	2.37	1.61	3.13	Siemens Centaur CP	
µU/ml = mIU/l	2.29	1.56	3.02	Siemens Centaur CP TSH3-Ultra	
µU/ml = mIU/l	2.08	1.66	2.50	Beckman Dxl 600/800 Access (3rd IS)	
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	11.6	9.28	13.9	Abbott Architect
	IU/ml	0.012	0.009	0.015	
	mU/ml=IU/l	27.5	22.0	33.0	BioMerieux Vidas
	IU/ml	0.028	0.022	0.034	
	mU/ml=IU/l	14.0	8.40	19.6	Siemens Centaur XP/XPT/Classic
	IU/ml	0.014	0.008	0.020	
	mU/ml=IU/l	26.4	21.1	31.7	Siemens Dimension
	IU/ml	0.026	0.021	0.031	
mU/ml=IU/l	34.2	27.4	41.0	Siemens Immulite 2000	
IU/ml	0.034	0.027	0.041		

## IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 1817EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Total Beta hCG	mU/ml=IU/l	32.9	26.3	39.5	Siemens Immulite 1000
	IU/ml	0.033	0.026	0.040	
	mU/ml=IU/l	12.9	10.3	15.5	Beckman Dxl800
	IU/ml	0.013	0.010	0.016	
	mU/ml=IU/l	11.6	9.28	13.9	Diasorin Liaison
	IU/ml	0.012	0.009	0.015	
	mU/ml=IU/l	14.8	11.8	17.8	Roche Cobas Core EIA
	IU/ml	0.015	0.012	0.018	
	mU/ml=IU/l	13.0	10.4	15.6	Beckman Access
	IU/ml	0.013	0.010	0.016	
	mU/ml=IU/l	26.7	21.4	32.0	Tosoh Series
	IU/ml	0.027	0.021	0.033	
	mU/ml=IU/l	30.4	24.3	36.5	Vitros Eci
	IU/ml	0.030	0.024	0.036	
	mU/ml=IU/l	17.8	14.2	21.4	Roche STAT (Intact)
	IU/ml	0.018	0.014	0.022	
	mU/ml=IU/l	15.0	12.0	18.0	Roche hCG+Beta
	IU/ml	0.015	0.012	0.018	
	mU/ml=IU/l	20.5	16.4	24.6	SNIBE Maglumi Analysers
	IU/ml	0.021	0.016	0.026	
mU/ml=IU/l	9.94	7.95	11.9	Fujirebio Lumipulse G Series	
IU/ml	0.010	0.008	0.012		
mU/ml=IU/l	12.9	10.3	15.5	Beckman Access Total BhCG (5th IS)	
IU/ml	0.013	0.010	0.016		
mU/ml=IU/l	13.1	10.5	15.7	Beckman Dxl Total BhCG (5th IS)	
IU/ml	0.013	0.011	0.015		
mU/ml=IU/l	14.4	8.64	20.2	Siemens Centaur CP	
IU/ml	0.014	0.008	0.020		
Total T3	nmol/l	3.31	2.48	4.14	Abbott Architect
	ng/ml	2.15	1.61	2.69	
	ng/dl	215	161	269	
	nmol/l	4.18	3.14	5.23	BioMerieux Vidas
	ng/ml	2.72	2.04	3.40	
	ng/dl	272	204	340	
	nmol/l	4.17	3.13	5.21	Siemens Centaur XP/XPT/Classic
	ng/ml	2.71	2.03	3.39	
	ng/dl	271	203	339	
	nmol/l	3.47	2.60	4.34	Siemens Immulite 2000/2500
	ng/ml	2.26	1.69	2.83	
	ng/dl	226	169	283	
	nmol/l	3.67	2.75	4.59	Siemens Immulite 1000
	ng/ml	2.39	1.79	2.99	
	ng/dl	239	179	299	
	nmol/l	3.42	2.57	4.28	Beckman Dxl800
ng/ml	2.23	1.67	2.79		
ng/dl	223	167	279		

## IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 1817EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Total T3	nmol/l	3.82	2.87	4.78	Roche Elecsys
	ng/ml	2.49	1.87	3.11	
	ng/dl	249	187	311	
	nmol/l	3.58	2.69	4.48	Diasorin Liaison
	ng/ml	2.33	1.75	2.91	
	ng/dl	233	175	291	
	nmol/l	3.99	2.99	4.99	Roche Modular E170
	ng/ml	2.60	1.95	3.25	
	ng/dl	260	195	325	
	nmol/l	3.39	2.54	4.24	Beckman Access
	ng/ml	2.21	1.65	2.77	
	ng/dl	221	165	277	
	nmol/l	3.64	2.73	4.55	Tosoh Series
	ng/ml	2.37	1.78	2.96	
	ng/dl	237	178	296	
	nmol/l	4.23	3.17	5.29	Vitros ECi
	ng/ml	2.75	2.06	3.44	
	ng/dl	275	206	344	
	nmol/l	2.89	2.17	3.61	CIS RIA Coated tube
	ng/ml	1.88	1.41	2.35	
	ng/dl	188	141	235	
	nmol/l	4.08	3.06	5.10	Roche Cobas E411
	ng/ml	2.66	1.99	3.33	
	ng/dl	266	199	333	
nmol/l	3.98	2.99	4.98	Roche Cobas 6000/8000	
ng/ml	2.59	1.95	3.23		
ng/dl	259	195	323		
nmol/l	4.15	3.11	5.19	SNIBE Maglumi Analysers	
ng/ml	2.70	2.02	3.38		
ng/dl	270	202	338		
nmol/l	4.20	3.15	5.25	Siemens Centaur CP	
ng/ml	2.73	2.05	3.41		
ng/dl	273	205	341		
Total T4	nmol/l	134	101	168	Abbott Architect
	µg/dl	10.5	7.88	13.1	
	ng/ml	105	78.8	131	
	nmol/l	154	116	193	BioMerieux Vidas
	µg/dl	12.0	9.05	15.0	
	ng/ml	120	90.5	150	
	nmol/l	140	91.0	189	Siemens Centaur XP/XPT/Classic
	µg/dl	10.9	7.09	14.7	
	ng/ml	109	70.9	147	
	nmol/l	138	104	173	Siemens Immulite 2000/2500
	µg/dl	10.8	8.11	13.5	
	ng/ml	108	81.1	135	
	nmol/l	141	106	176	Siemens Immulite 1000
	µg/dl	11.0	8.27	13.7	
	ng/ml	110	82.7	137	

## IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 1817EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Range					
Analyte	unit	Target	low	high	methods
Total T4	nmol/l	142	107	178	Beckman DxI800
	µg/dl	11.1	8.35	13.9	
	ng/ml	111	83.5	139	
	nmol/l	130	97.5	163	Roche Elecsys
	µg/dl	10.1	7.61	12.6	
	ng/ml	101	76.1	126	
	nmol/l	127	95.3	159	Roche Modular E170
	µg/dl	9.91	7.43	12.4	
	ng/ml	99.1	74.3	124	
	nmol/l	147	110	184	Beckman Access
	µg/dl	11.5	8.58	14.4	
	ng/ml	115	85.8	144	
	nmol/l	126	94.5	158	Tosoh Series
	µg/dl	9.83	7.37	12.3	
	ng/ml	98.3	73.7	123	
	nmol/l	139	104	174	Vitros ECi
	µg/dl	10.8	8.11	13.5	
	ng/ml	108	81.1	135	
	nmol/l	137	103	171	CIS RIA Coated tube
	µg/dl	10.7	8.03	13.4	
	ng/ml	107	80.3	134	
nmol/l	134	101	168	Roche Cobas E411	
µg/dl	10.5	7.88	13.1		
ng/ml	105	78.8	131		
nmol/l	129	96.8	161	Roche Cobas 6000/8000	
µg/dl	10.1	7.55	12.7		
ng/ml	101	75.5	127		
nmol/l	109	81.8	136	Immunotech IRMA	
µg/dl	8.50	6.38	10.6		
ng/ml	85.0	63.8	106		
nmol/l	141	106	176	SNIBE Maglumi Analysers	
µg/dl	11.0	8.27	13.7		
ng/ml	110	82.7	137		
nmol/l	151	98.2	204	Siemens Centaur CP	
µg/dl	11.8	7.67	15.9		
ng/ml	118	76.7	159		
Valproic Acid	µmol/l	495	396	594	Abbott Architect
	µg/ml	71.4	57.1	85.7	
	µmol/l	545	436	654	Siemens Centaur XP/XPT/Classic
	µg/ml	78.6	62.9	94.3	
	µmol/l	523	418	628	Siemens Dimension
	µg/ml	75.5	60.3	90.7	
	µmol/l	523	418	628	Siemens Immulite 2000/2500
	µg/ml	75.5	60.3	90.7	

## IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 1817EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Valproic Acid	µmol/l	534	427	641	Siemens Immulite 1000
	µg/ml	77.1	61.6	92.6	
	µmol/l	514	411	617	Roche Integra
	µg/ml	74.2	59.3	89.1	
	µmol/l	539	431	647	Vitros
	µg/ml	77.8	62.2	93.4	
	µmol/l	531	425	637	Roche Cobas 6000/8000
	µg/ml	76.6	61.3	91.9	
	µmol/l	514	411	617	Beckman DxC
	µg/ml	74.2	59.3	89.1	
	µmol/l	572	458	686	Beckman AU400/600/640/2700/5400
	µg/ml	82.5	66.1	98.9	
µmol/l	553	442	664	Siemens ADVIA 1200/1650/1800/2400	
µg/ml	79.8	63.8	95.8		
µmol/l	638	510	766	Gravimetric	
µg/ml	92.1	73.6	111		
Vancomycin	µmol/l	7.77	6.22	9.32	Roche Integra
	µg/ml	11.5	9.24	13.8	
	µmol/l	7.10	5.68	8.52	Abbott Architect
	µg/ml	10.5	8.44	12.6	
	µmol/l	5.57	4.34	6.80	Siemens Centaur XP/XPT/Classic
	µg/ml	8.28	6.46	10.1	
	µmol/l	6.62	5.30	7.94	Siemens Dimension
	µg/ml	9.84	7.87	11.8	
	µmol/l	6.74	5.39	8.09	Roche Cobas 6000/8000
	µg/ml	10.0	8.01	12.0	
	µmol/l	7.16	5.73	8.59	Beckman DxC
	µg/ml	10.6	8.51	12.7	
µmol/l	7.10	5.68	8.52	Gravimetric	
µg/ml	10.5	8.44	12.7		
Vitamin B12	pmol/l	465	372	558	Abbott Architect
	pg/ml	630	504	756	
	pmol/l	519	389	649	Siemens Centaur XP/XPT/Classic
	pg/ml	703	527	879	
	pmol/l	463	370	556	Siemens Immulite 2000
	pg/ml	627	501	753	
	pmol/l	426	341	511	Beckman Dxl800
	pg/ml	577	462	692	
	pmol/l	516	413	619	Roche Elecsys
	pg/ml	699	560	838	
	pmol/l	509	407	611	Roche Modular E170
	pg/ml	690	551	829	
pmol/l	437	350	524	Beckman Access	
pg/ml	592	474	710		
pmol/l	618	494	742	Tosoh Series	
pg/ml	837	669	1005		

## IMMUNOASSAY PREMIUM - LEVEL 2 (IA PREMIUM 2)

Cat. No. IA2639 / IA2633 Lot No. 1817EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Range					
Analyte	unit	Target	low	high	methods
Vitamin B12	pmol/l	504	403	605	Vitros ECI
	pg/ml	683	546	820	
	pmol/l	501	401	601	MP Biomedicals RIA
	pg/ml	679	543	815	
	pmol/l	495	396	594	Roche Cobas E411
	pg/ml	671	537	805	
	pmol/l	513	410	616	Roche Cobas 6000/8000
	pg/ml	695	556	834	
	pmol/l	443	354	532	Siemens Dimension
	pg/ml	600	480	720	
	pmol/l	425	340	510	SNIBE Maglumi Analysers
	pg/ml	576	461	691	
	pmol/l	521	391	651	Siemens Centaur CP
	pg/ml	706	530	882	

## IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

<b>CAT. NO.</b> IA2640	<b>GTIN:</b> 05055273203868	<b>SIZE:</b> 12 x 5 ml
<b>CAT. NO.</b> IA2633	<b>GTIN:</b> 05055273203837	<b>SIZE:</b> 4 x 5 ml
<b>LOT NO.</b> 1818EC	<b>EXPIRY:</b> 2021-05-28	

### 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.

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.

- 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.
- Refer to the Control section of the individual analyser application.
- 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](mailto:Technical.Services@randox.com).

06 Dec '18 ne



## IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 1818EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods	
			low	high		
17-OH-Progesterone	nmol/l	31.3	23.5	39.1	Immunotech RIA	
	ng/ml	10.4	7.78	13.0		
	nmol/l	35.7	26.8	44.6	DIAsource RIA	
	ng/ml	11.8	8.87	14.7		
	nmol/l	35.9	26.9	44.9	DiaMetra ELISA	
	ng/ml	11.9	8.90	14.9		
25-OH Vitamin D	nmol/l	40.9	30.7	51.1	IBL ELISA	
	ng/ml	13.5	10.2	16.8		
	nmol/l	40.6	30.5	50.8	SNIBE Maglumi Analysers	
	ng/ml	13.4	10.1	16.7		
	nmol/l	98.5	73.9	123	Diasorin Liaison	
	nmol/l	118	88.5	148	Siemens Centaur XP/XPT/Classic	
25-OH Vitamin D	nmol/l	80.7	60.5	101	Roche Vitamin D Total	
	nmol/l	93.5	70.1	117	HPLC	
	nmol/l	85.8	64.4	107	Abbott Architect	
	nmol/l	98.0	73.5	123	IDS iSYS	
	nmol/l	89.0	66.8	111	SNIBE Maglumi Analysers	
	nmol/l	105	78.8	131	Vitros ECi	
	nmol/l	79.4	59.6	99.0	Tosoh Series	
	nmol/l	86.9	65.2	109	BioMerieux Vidas	
	nmol/l	81.8	61.4	102	Beckman Dxl 600/800	
	nmol/l	90.1	67.6	113	Fujirebio Lumipulse G Series	
	nmol/l	82.7	62.0	103	Beckman Access 25 OH Vitamin D Total	
	nmol/l	94.4	70.8	118	Roche Vitamin D Total II	
ACTH	pmol/l	40.4	30.3	50.5	Siemens Immulite 2000/2500	
	pg/ml	184	138	230		
	pmol/l	27.3	20.5	34.1	Roche Cobas 6000/8000	
	pg/ml	124	93.2	155		
	pmol/l	76.0	57.0	95.0	CIS IRMA	
	pg/ml	345	259	431		
ACTH	pmol/l	42.3	31.7	52.9	Siemens Immulite 1000	
	pg/ml	192	144	240		
	pmol/l	37.1	27.8	46.4	SNIBE Maglumi Analysers	
	pg/ml	169	126	212		
	Aldosterone	pmol/l	741	556	926	DRG ELISA
		pg/ml	267	201	333	
pmol/l		227	170	284	CIS RIA	
pg/ml		81.9	61.3	103		
pmol/l		1067	800	1334	Immunotech RIA	
pg/ml		385	289	481		
Aldosterone	pmol/l	839	629	1049	ELISA	
	pg/ml	303	227	379		

## IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 1818EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Aldosterone	pmol/l	610	458	763	SNIBE Maglumi Analysers
	pg/ml	220	165	275	
	pmol/l	713	535	891	IDS iSYS
	pg/ml	257	193	321	
Alpha-fetoprotein	pmol/l	596	447	745	Diasorin Liaison
	pg/ml	215	161	269	
	KIU/l = IU/ml	153	122	184	Abbott Architect
	ng/ml	185	148	222	
	KIU/l = IU/ml	162	130	194	BioMerieux Vidas
	ng/ml	196	157	235	
	KIU/l = IU/ml	180	142	218	Siemens Centaur XP/XPT/Classic
	ng/ml	218	172	264	
	KIU/l = IU/ml	144	115	173	Siemens Immulite 2000/2500
	ng/ml	174	139	209	
	KIU/l = IU/ml	148	118	178	Siemens Immulite 1000
	ng/ml	179	143	215	
	KIU/l = IU/ml	156	125	187	Beckman DxI800
	ng/ml	189	151	227	
	KIU/l = IU/ml	168	134	202	Roche Elecsys
	ng/ml	203	162	244	
	KIU/l = IU/ml	187	150	224	Diasorin Liaison
	ng/ml	226	182	270	
	KIU/l = IU/ml	166	133	199	Roche Modular E170
	ng/ml	201	161	241	
KIU/l = IU/ml	159	127	191	Beckman Access	
ng/ml	192	154	230		
KIU/l = IU/ml	145	116	174	Tosoh Series	
ng/ml	175	140	210		
KIU/l = IU/ml	172	138	206	Vitros ECI	
ng/ml	179	143	215		
KIU/l = IU/ml	173	138	208	Roche Cobas 6000/8000	
ng/ml	209	167	251		
KIU/l = IU/ml	199	159	239	CIS IRMA	
ng/ml	241	192	290		
KIU/l = IU/ml	174	139	209	Roche Cobas E411	
ng/ml	211	168	254		
KIU/l = IU/ml	161	129	193	SNIBE Maglumi Analysers	
ng/ml	195	156	234		
KIU/l = IU/ml	158	126	190	Fujirebio Lumipulse G Series	
ng/ml	191	152	230		
KIU/l = IU/ml	184	147	221	Siemens Dimension	
ng/ml	223	178	268		
KIU/l = IU/ml	182	144	220	Siemens Centaur CP	
ng/ml	220	174	266		
Amikacin	µmol/l	23.2	18.6	27.8	Roche Integra
	µg/ml	13.6	10.9	16.3	

## IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 1818EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Amikacin	µmol/l	23.3	18.6	28.0	Roche Cobas 6000/8000
	µg/ml	13.6	10.9	16.3	
	µmol/l	24.1	19.3	28.9	Gravimetric
	µg/ml	14.1	11.3	16.9	
Androstenedione	nmol/l	31.7	23.8	39.6	Siemens Immulite 2000
	ng/ml	9.10	6.83	11.4	
Beta-2-microglobulin	µg/ml = mg/l	7.37	5.90	8.84	Abbott Architect
	µg/ml = mg/l	7.14	5.71	8.57	BioMerieux Vidas
	µg/ml = mg/l	7.54	6.03	9.05	Behring Nephelometer
	µg/ml = mg/l	6.24	4.99	7.49	Siemens Immulite 2000/2500
	µg/ml = mg/l	7.03	5.62	8.44	Siemens Immulite 1000
	µg/ml = mg/l	6.51	5.21	7.81	Diasorin Liaison
	µg/ml = mg/l	7.76	6.21	9.31	Tosoh Series
	µg/ml = mg/l	7.11	5.69	8.53	Roche Cobas 6000/8000
	µg/ml = mg/l	6.56	5.25	7.87	SNIBE Maglumi Analysers
	µg/ml = mg/l	6.01	4.81	7.21	Fujirebio Lumipulse G Series
C-Peptide	µg/ml = mg/l	7.60	6.08	9.12	Siemens ADVIA 1200/1650/1800/2400
	nmol/l	2.830	2.120	3.540	Siemens Immulite 2000/2500
	ng/ml	8.54	6.40	10.7	
	nmol/l	2.690	2.020	3.360	Roche Elecsys
	ng/ml	8.12	6.10	10.1	
	nmol/l	2.750	2.060	3.440	Roche Cobas 6000/8000
	ng/ml	8.30	6.22	10.4	
	nmol/l	2.790	2.090	3.490	Siemens Immulite 1000
	ng/ml	8.42	6.31	10.5	
	nmol/l	3.070	2.300	3.840	Diasorin Liaison
	ng/ml	9.27	6.94	11.6	
	nmol/l	2.790	2.090	3.490	Roche Cobas E411
	ng/ml	8.42	6.31	10.5	
	nmol/l	2.530	1.900	3.160	Abbott Architect
	ng/ml	7.64	5.74	9.54	
	nmol/l	2.140	1.610	2.670	Siemens Centaur XP/XPT/Classic
	ng/ml	6.46	4.85	8.07	
	nmol/l	2.570	1.930	3.210	Tosoh Series
ng/ml	7.76	5.83	9.69		
nmol/l	3.000	2.250	3.750	SNIBE Maglumi Analysers	
ng/ml	9.06	6.79	11.3		
Carbamazepine	µmol/l	68.1	54.5	81.7	Abbott Architect
	µg/ml	16.1	12.9	19.3	
	µmol/l	71.0	44.0	98.0	Siemens Centaur XP/XPT/Classic
	µg/ml	16.8	10.4	23.2	
	µmol/l	67.5	54.0	81.0	Siemens Dimension
	µg/ml	16.0	12.8	19.2	
	µmol/l	61.7	49.4	74.0	Siemens Immulite 2000/2500
	µg/ml	14.6	11.7	17.5	
µmol/l	61.8	49.4	74.2	Siemens Immulite 1000	
µg/ml	14.6	11.7	17.5		

## IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 1818EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Carbamazepine	µmol/l	72.3	57.8	86.8	Roche Integra
	µg/ml	17.1	13.7	20.5	
	µmol/l	63.8	51.0	76.6	Vitros
	µg/ml	15.1	12.1	18.1	
	µmol/l	67.3	53.8	80.8	Roche Cobas E411
	µg/ml	15.9	12.7	19.1	
	µmol/l	67.1	53.7	80.5	Roche Cobas 6000/8000
	µg/ml	15.9	12.7	19.1	
	µmol/l	68.2	54.6	81.8	Beckman DxC
	µg/ml	16.1	12.9	19.3	
	µmol/l	72.6	58.1	87.1	Beckman AU400/600/640/2700/5400
	µg/ml	17.2	13.7	20.7	
	µmol/l	71.8	57.4	86.2	Siemens ADVIA 1200/1650/1800/2400
	µg/ml	17.0	13.6	20.4	
Carcinoembryonic Antigen (CEA)	µmol/l	72.2	57.8	86.6	Gravimetric
	µg/ml	17.1	13.7	20.5	
	ng/ml = µg/l	63.5	50.8	76.2	Abbott Architect
	ng/ml = µg/l	58.5	46.8	70.2	BioMerieux Vidas
	ng/ml = µg/l	58.3	40.2	76.4	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	46.3	37.0	55.6	CIS RIA Coated tube
	ng/ml = µg/l	77.9	62.3	93.5	Siemens Immulite 2000/2500
	ng/ml = µg/l	79.4	63.5	95.3	Siemens Immulite 1000
	ng/ml = µg/l	52.2	41.8	62.6	Beckman Dxl800
	ng/ml = µg/l	48.0	38.4	57.6	Roche Elecsys
	ng/ml = µg/l	53.6	42.9	64.3	Diasorin Liaison
	ng/ml = µg/l	48.0	38.4	57.6	Roche Modular E170
	ng/ml = µg/l	54.3	43.4	65.2	Beckman Access
	ng/ml = µg/l	75.0	60.0	90.0	Tosoh Series
	ng/ml = µg/l	62.5	50.0	75.0	Vitros ECi
	ng/ml = µg/l	48.2	38.6	57.8	Roche Cobas 6000/8000
	ng/ml = µg/l	48.6	38.9	58.3	Roche Cobas E411
	ng/ml = µg/l	48.0	38.4	57.6	SNIBE Maglumi Analysers
ng/ml = µg/l	78.5	62.8	94.2	Fujirebio Lumipulse G Series	
ng/ml = µg/l	60.4	41.7	79.1	Siemens Centaur CP	
Cortisol	nmol/l	875	656	1094	Abbott Architect
	µg/dl	31.5	23.6	39.4	
	nmol/l	947	710	1184	BioMerieux Vidas
	µg/dl	34.1	25.6	42.6	
	nmol/l	1138	785	1491	Siemens Centaur XP/XPT/Classic
	µg/dl	41.0	28.3	53.7	
	nmol/l	844	633	1055	CIS RIA
	µg/dl	30.4	22.8	38.0	
	nmol/l	965	724	1206	Siemens Immulite 2000/2500
	µg/dl	34.7	26.1	43.3	
nmol/l	1014	761	1268	Siemens Immulite 1000	
µg/dl	36.5	27.4	45.6		

## IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 1818EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Cortisol	nmol/l	972	729	1215	Beckman Dxl800
	µg/dl	35.0	26.2	43.8	
	nmol/l	1047	785	1309	Roche Elecsys
	µg/dl	37.7	28.3	47.1	
	nmol/l	1014	761	1268	Diasorin Liaison
	µg/dl	36.5	27.4	45.6	
	nmol/l	1076	807	1345	Beckman Access
	µg/dl	38.7	29.1	48.3	
	nmol/l	1033	775	1291	Tosoh Series
	µg/dl	37.2	27.9	46.5	
	nmol/l	935	701	1169	Vitros ECI
	µg/dl	33.7	25.2	42.2	
	nmol/l	1006	755	1258	Roche Cobas 6000/8000
	µg/dl	36.2	27.2	45.2	
	nmol/l	1053	790	1316	Roche Cobas E411
	µg/dl	37.9	28.4	47.4	
	nmol/l	994	746	1243	SNIBE Maglumi Analysers
	µg/dl	35.8	26.9	44.7	
nmol/l	1243	858	1628	Siemens Centaur CP	
µg/dl	44.7	30.8	58.6		
nmol/l	1009	757	1261	Roche Modular E170 Gen II	
µg/dl	36.3	27.3	45.3		
nmol/l	1057	793	1321	Roche Cobas 4000/e411 Gen II	
µg/dl	38.1	28.5	47.7		
nmol/l	979	734	1224	Roche Cobas 6000/8000 Gen II	
µg/dl	35.2	26.4	44.0		
nmol/l	1021	766	1276	Roche Elecsys Gen II	
µg/dl	36.8	27.6	46.0		
DHEA-S	µmol/l	22.0	17.6	26.4	Abbott Architect
	µmol/l	18.4	14.7	22.1	Siemens Immulite 2000/2500
	µmol/l	18.4	14.7	22.1	Siemens Immulite 1000
	µmol/l	16.9	13.5	20.3	Beckman Dxl800
	µmol/l	26.5	21.2	31.8	Roche Elecsys
	µmol/l	26.3	21.0	31.6	Roche Modular E170
	µmol/l	17.6	14.1	21.1	Beckman Access
	µmol/l	15.6	12.5	18.7	Diasorin Liaison
	µmol/l	18.1	10.9	25.3	Siemens Centaur XP/XPT/Classic
	µmol/l	26.0	20.8	31.2	Roche Cobas E411
	µmol/l	26.0	20.8	31.2	Roche Cobas 6000/8000
	µmol/l	16.9	13.5	20.3	SNIBE Maglumi Analysers
Digoxin	nmol/l	4.17	3.34	5.00	Abbott Architect
	ng/ml	3.26	2.61	3.91	
	nmol/l	4.78	3.82	5.74	BioMerieux Vidas
	ng/ml	3.73	2.98	4.48	
	nmol/l	5.28	4.12	6.44	Siemens Centaur XP/XPT/Classic
ng/ml	4.12	3.21	5.03		

## IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 1818EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Digoxin	nmol/l	4.80	3.84	5.76	Siemens Dimension
	ng/ml	3.75	3.00	4.50	
	nmol/l	5.36	4.29	6.43	Siemens Immulite 2000/2500
	ng/ml	4.19	3.35	5.03	
	nmol/l	4.89	3.91	5.87	Beckman DxI800
	ng/ml	3.82	3.05	4.59	
	nmol/l	5.43	4.34	6.52	Roche Elecsys
	ng/ml	4.24	3.39	5.09	
	nmol/l	4.79	3.83	5.75	Roche Integra
	ng/ml	3.74	2.99	4.49	
	nmol/l	4.80	3.84	5.76	Vitros
	ng/ml	3.75	3.00	4.50	
	nmol/l	4.98	3.98	5.98	Roche Cobas 6000/8000
	ng/ml	3.89	3.11	4.67	
	nmol/l	4.22	3.38	5.06	Beckman DxC
	ng/ml	3.30	2.64	3.96	
	nmol/l	5.10	4.08	6.12	Beckman AU400/600/640/2700/5400
	ng/ml	3.98	3.19	4.77	
	nmol/l	4.67	3.74	5.60	Siemens ADVIA 1200/1650/1800/2400
	ng/ml	3.65	2.92	4.38	
nmol/l	5.71	4.57	6.85	SNIBE Maglumi Analysers	
ng/ml	4.46	3.57	5.35		
nmol/l	5.00	4.00	6.00	Roche Cobas 4000/E411	
ng/ml	3.91	3.12	4.70		
nmol/l	5.12	4.10	6.14	Gravimetric	
ng/ml	4.00	3.20	4.80		
Ethosuximide	µmol/l	493	394	592	Gravimetric
	µg/ml	69.9	55.9	83.9	
Ferritin	ng/ml = µg/l	353	282	424	Abbott Architect
	ng/ml = µg/l	243	194	292	BioMerieux Vidas
	ng/ml = µg/l	297	232	362	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	266	213	319	Siemens Dimension
	ng/ml = µg/l	268	214	322	Siemens Immulite 2000/2500
	ng/ml = µg/l	238	190	286	Siemens Immulite 1000
	ng/ml = µg/l	221	177	265	Beckman DxI800
	ng/ml = µg/l	319	255	383	Roche Elecsys
	ng/ml = µg/l	304	243	365	Diasorin Liaison
	ng/ml = µg/l	310	248	372	Roche Modular E170
	ng/ml = µg/l	226	181	271	Beckman Access
	ng/ml = µg/l	218	174	262	Tosoh Series
	ng/ml = µg/l	197	158	236	Vitros ECi
	ng/ml = µg/l	284	227	341	Immunotech IRMA
	ng/ml = µg/l	310	248	372	Roche Cobas E411
	ng/ml = µg/l	236	189	283	Siemens/Dade Behring Nephelometer
ng/ml = µg/l	235	188	282	Beckman AU400/600/640/2700/5400	

## IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 1818EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Ferritin	ng/ml = µg/l	224	179	269	SNIBE Maglumi Analysers
	ng/ml = µg/l	189	151	227	Fujirebio Lumipulse G Series
	ng/ml = µg/l	277	216	338	Siemens Centaur CP
Folate	nmol/l	17.9	13.6	22.2	Abbott Architect
	ng/ml	7.89	6.00	9.78	
	nmol/l	38.9	23.3	54.5	Siemens Centaur XP/XPT/Classic (enhanced kit)
	ng/ml	17.2	10.3	24.1	
	nmol/l	15.0	11.4	18.6	Siemens Immulite 2000
	ng/ml	6.62	5.03	8.21	
	nmol/l	20.3	15.4	25.2	Beckman Dxl800
	ng/ml	8.95	6.79	11.1	
	nmol/l	19.8	15.0	24.6	Roche Elecsys
	ng/ml	8.73	6.62	10.8	
	nmol/l	20.4	15.5	25.3	Beckman Access
	ng/ml	9.00	6.84	11.2	
	nmol/l	30.6	23.3	37.9	Tosoh Series
	ng/ml	13.5	10.3	16.7	
	nmol/l	13.5	10.3	16.7	Vitros Eci
	ng/ml	5.95	4.54	7.36	
	nmol/l	14.8	11.2	18.4	MP Biomedicals RIA
	ng/ml	6.53	4.94	8.12	
	nmol/l	19.3	14.7	23.9	Roche Cobas E411
	ng/ml	8.51	6.48	10.5	
	nmol/l	20.6	15.7	25.5	Roche Cobas 6000/8000
	ng/ml	9.08	6.92	11.2	
	nmol/l	12.0	9.12	14.9	Siemens Dimension
	ng/ml	5.29	4.02	6.56	
nmol/l	43.9	33.4	54.4	SNIBE Maglumi Analysers	
ng/ml	19.4	14.7	24.1		
nmol/l	44.6	26.8	62.4	Siemens Centaur CP (enhanced kit)	
ng/ml	19.7	11.8	27.6		
nmol/l	19.8	15.0	24.6	Roche Cobas 6000/8000 Folate III	
ng/ml	8.73	6.62	10.8		
nmol/l	20.7	15.7	25.7	Roche Cobas 4000/e411 Folate III	
ng/ml	9.13	6.92	11.3		
Free T3	pmol/l	23.0	17.3	28.8	Abbott Architect
	ng/dl	1.50	1.12	1.88	
	pg/ml	15.0	11.3	18.7	
	pmol/l	23.8	17.9	29.8	BioMerieux Vidas
	ng/dl	1.55	1.16	1.94	
	pg/ml	15.5	11.7	19.3	
	pmol/l	24.2	14.5	33.9	Siemens Centaur XP/XPT/Classic
	ng/dl	1.57	0.942	2.20	
	pg/ml	15.8	9.48	22.1	
	pmol/l	15.9	11.9	19.9	Siemens Immulite 2000/2500
	ng/dl	1.03	0.774	1.29	
	pg/ml	10.4	7.75	13.1	

## IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 1818EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Free T3	pmol/l	14.7	11.0	18.4	Siemens Immulite 1000
	ng/dl	0.956	0.715	1.20	
	pg/ml	9.57	7.16	12.0	
	pmol/l	18.5	13.9	23.1	Beckman Dxl800
	ng/dl	1.20	0.904	1.50	
	pg/ml	12.0	9.05	15.0	
	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	38.1	28.6	47.6	Diasorin Liaison
	ng/dl	2.48	1.86	3.10	
	pg/ml	24.8	18.6	31.0	
	pmol/l	29.1	21.8	36.4	Roche Modular E170
	ng/dl	1.89	1.42	2.36	
	pg/ml	18.9	14.2	23.6	
	pmol/l	19.5	14.6	24.4	Beckman Access
	ng/dl	1.27	0.949	1.59	
	pg/ml	12.7	9.50	15.9	
	pmol/l	34.2	25.7	42.8	Tosoh Series
	ng/dl	2.22	1.67	2.77	
	pg/ml	22.3	16.7	27.9	
	pmol/l	35.1	26.3	43.9	Vitros ECi
	ng/dl	2.28	1.71	2.85	
	pg/ml	22.9	17.1	28.7	
pmol/l	29.8	22.4	37.3	Roche Cobas E411	
ng/dl	1.94	1.46	2.42		
pg/ml	19.4	14.6	24.2		
pmol/l	29.6	22.2	37.0	Roche Cobas 6000/8000	
ng/dl	1.92	1.44	2.40		
pg/ml	19.3	14.5	24.1		
pmol/l	33.3	25.0	41.6	Siemens Dimension Vista LOCI	
ng/dl	2.16	1.63	2.69		
pg/ml	21.7	16.3	27.1		
pmol/l	27.3	20.5	34.1	SNIBE Maglumi Analysers	
ng/dl	1.77	1.33	2.21		
pg/ml	17.8	13.3	22.3		
pmol/l	23.1	13.9	32.3	Siemens Centaur CP	
ng/dl	1.50	0.900	2.10		
pg/ml	15.0	9.00	21.0		
Free T4	pmol/l	53.5	40.1	66.9	Abbott Architect
	ng/dl	4.17	3.13	5.21	
	pg/ml	41.7	31.3	52.1	
	pmol/l	56.2	42.2	70.2	Siemens Centaur XP/XPT/Classic
	ng/dl	4.38	3.29	5.47	
pg/ml	43.8	32.9	54.7		



## IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 1818EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Free T4	pmol/l	62.7	47.0	78.4	CIS RIA Coated tube
	ng/dl	4.89	3.67	6.11	
	pg/ml	48.9	36.7	61.1	
	pmol/l	74.9	56.2	93.6	Siemens Immulite 2000/2500
	ng/dl	5.84	4.38	7.30	
	pg/ml	58.4	43.8	73.0	
	pmol/l	76.9	57.7	96.1	Siemens Immulite 1000
	ng/dl	6.00	4.50	7.50	
	pg/ml	60.0	45.0	75.0	
	pmol/l	57.9	43.4	72.4	Beckman Dxl800
	ng/dl	4.52	3.39	5.65	
	pg/ml	45.2	33.9	56.5	
	pmol/l	83.1	62.3	104	Roche Elecsys
	ng/dl	6.48	4.86	8.10	
	pg/ml	64.8	48.6	81.0	
	pmol/l	118	88.5	148	Diasorin Liaison
	ng/dl	9.20	6.90	11.5	
	pg/ml	92.0	69.0	115	
	pmol/l	79.8	59.9	100	Roche Modular E170
	ng/dl	6.22	4.67	7.77	
	pg/ml	62.2	46.7	77.7	
	pmol/l	54.7	41.0	68.4	Beckman Access
	ng/dl	4.27	3.20	5.34	
	pg/ml	42.7	32.0	53.4	
	pmol/l	80.9	60.7	101	Tosoh Series
	ng/dl	6.31	4.73	7.89	
	pg/ml	63.1	47.3	78.9	
	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	80.2	60.2	100	Roche Cobas 6000/8000	
ng/dl	6.26	4.70	7.82		
pg/ml	62.6	47.0	78.2		
pmol/l	60.7	45.5	75.9	Immunotech IRMA	
ng/dl	4.73	3.55	5.91		
pg/ml	47.3	35.5	59.1		
pmol/l	82.9	62.2	104	Roche Cobas E411	
ng/dl	6.47	4.85	8.09		
pg/ml	64.7	48.5	80.9		
pmol/l	55.8	41.9	69.8	ELISA	
ng/dl	4.35	3.27	5.43		
pg/ml	43.5	32.7	54.3		
pmol/l	93.6	70.2	117	Siemens Dimension Vista LOCI	
ng/dl	7.30	5.48	9.12		
pg/ml	73.0	54.8	91.2		
pmol/l	124	93.0	155	SNIBE Maglumi Analysers	
ng/dl	9.67	7.25	12.1		
pg/ml	96.7	72.5	121		

## IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 1818EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Free T4	pmol/l	84.2	63.2	105	Biomerieux Vidas FT4N Kit
	ng/dl	6.57	4.93	8.21	
	pg/ml	65.7	49.3	82.1	
	pmol/l	64.8	48.6	81.0	Siemens Centaur CP
	ng/dl	5.05	3.79	6.31	
	pg/ml	50.5	37.9	63.1	
FSH	mU/ml	47.0	37.6	56.4	Abbott Architect
	mU/ml	64.8	51.8	77.8	BioMerieux Vidas
	mU/ml	72.3	56.4	88.2	Siemens Centaur XP/XPT/Classic
	mU/ml	56.8	45.4	68.2	Siemens Immulite 2000/2500
	mU/ml	55.0	44.0	66.0	Siemens Immulite 1000
	mU/ml	57.7	46.2	69.2	Beckman Dxl800
	mU/ml	54.2	43.4	65.0	Roche/BM Elecsys
	mU/ml	65.0	52.0	78.0	Diasorin Liaison
	mU/ml	49.9	39.9	59.9	Roche Modular E170
	mU/ml	57.7	46.2	69.2	Beckman Access
	mU/ml	51.9	41.5	62.3	Tosoh Series
	mU/ml	40.5	32.4	48.6	Vitros ECi
	mU/ml	53.6	42.9	64.3	Roche Cobas E411
	mU/ml	50.9	40.7	61.1	Roche Cobas 6000/8000
	mU/ml	62.5	50.0	75.0	SNIBE Maglumi Analysers
	mU/ml	43.9	35.1	52.7	Fujirebio Lumipulse G Series
mU/ml	60.9	47.5	74.3	Siemens Centaur CP	
Gentamicin	µmol/l	9.26	7.41	11.1	Roche Integra
	µg/ml	4.43	3.54	5.32	
	µmol/l	12.6	9.58	15.6	Siemens Centaur XP/XPT/Classic
	µg/ml	6.02	4.58	7.46	
	µmol/l	10.2	8.16	12.2	Siemens Dimension Vista
	µg/ml	4.88	3.90	5.86	
	µmol/l	7.82	6.26	9.38	Roche Cobas 6000/8000
	µg/ml	3.74	2.99	4.49	
	µmol/l	12.7	10.2	15.2	Beckman DxC
	µg/ml	6.07	4.88	7.26	
Growth Hormone (GH)	µU/ml	38.6	30.9	46.3	Siemens Immulite 2000/2500
	ng/ml	12.9	10.3	15.5	
	µU/ml	37.2	29.8	44.6	Siemens Immulite 1000
	ng/ml	12.4	9.92	14.9	
	µU/ml	31.5	25.2	37.8	Beckman Dxl800
	ng/ml	10.5	8.39	12.6	
	µU/ml	39.6	31.7	47.5	Roche Elecsys
	ng/ml	13.2	10.6	15.8	
	µU/ml	33.0	26.4	39.6	Beckman Access
	ng/ml	11.0	8.79	13.2	

## IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 1818EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods	
			low	high		
Growth Hormone (GH)	µU/ml	36.7	29.4	44.0	Tosoh Series	
	ng/ml	12.2	9.79	14.6		
	µU/ml	35.4	28.3	42.5	Diasorin Liaison	
	ng/ml	11.8	9.42	14.2		
	µU/ml	38.0	30.4	45.6	Roche Cobas E411	
	ng/ml	12.7	10.1	15.3		
	µU/ml	54.7	43.8	65.6	SNIBE Maglumi Analysers	
	ng/ml	18.2	14.6	21.8		
	µU/ml	38.2	30.6	45.8	Roche Cobas 6000/8000	
	ng/ml	12.7	10.2	15.2		
	µU/ml	33.9	27.1	40.7	IDS iSYS	
	ng/ml	11.3	9.02	13.6		
	Immunoglobulin E	KIU/I = IU/ml	539	431	647	Abbott Architect
		KIU/I = IU/ml	475	380	570	BioMerieux Vidas
KIU/I = IU/ml		466	280	652	Siemens Centaur XP/XPT/Classic	
KIU/I = IU/ml		487	390	584	Siemens Immulite 2000/2500	
KIU/I = IU/ml		511	409	613	Siemens Immulite 1000	
KIU/I = IU/ml		516	413	619	Beckman Dxl800	
KIU/I = IU/ml		514	411	617	Roche Elecsys	
KIU/I = IU/ml		456	365	547	Pharmacia Unicap	
KIU/I = IU/ml		514	411	617	Roche Modular E170	
KIU/I = IU/ml		486	389	583	Tosoh Series	
KIU/I = IU/ml		511	409	613	Roche Cobas E411	
KIU/I = IU/ml		517	414	620	Roche Cobas 6000/8000	
KIU/I = IU/ml		461	369	553	SNIBE Maglumi Analysers	
KIU/I = IU/ml		414	331	497	Fujirebio Lumipulse G Series	
KIU/I = IU/ml	434	260	608	Siemens Centaur CP		
Insulin	mU/l	30.8	23.1	38.5	Siemens Centaur XP/XPT/Classic	
	µU/ml	30.8	23.1	38.5		
	mU/l	9.76	7.32	12.2	Siemens Immulite 1000	
	µU/ml	9.76	7.32	12.2		
	mU/l	36.8	27.6	46.0	Roche Modular E170	
	µU/ml	36.8	27.6	46.0		
	mU/l	34.7	26.0	43.4	Roche Elecsys	
	µU/ml	34.7	26.0	43.4		
	mU/l	27.8	20.9	34.8	Beckman Access	
	µU/ml	27.8	20.9	34.7		
	mU/l	27.2	20.4	34.0	Abbott Architect	
	µU/ml	27.2	20.4	34.0		
	mU/l	37.5	28.1	46.9	Tosoh Series	
	µU/ml	37.5	28.1	46.9		
	mU/l	35.1	26.3	43.9	Roche Cobas E411	
	µU/ml	35.1	26.3	43.9		
mU/l	26.5	19.9	33.1	Beckman Dxl 600/800		
µU/ml	26.5	19.9	33.1			

## IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 1818EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Insulin	mU/l	38.4	28.8	48.0	Diasorin Liaison
	µU/ml	38.4	28.8	48.0	
	mU/l	35.6	26.7	44.5	Roche Cobas 6000/8000
	µU/ml	35.6	26.7	44.5	
	mU/l	27.9	20.9	34.9	SNIBE Maglumi Analysers
	µU/ml	27.9	20.9	34.9	
	mU/l	34.4	25.8	43.0	Fujirebio Lumipulse G Series
	µU/ml	34.4	25.8	43.0	
Luteinising Hormone (LH)	mU/ml	30.1	24.1	36.1	Abbott Architect
	mU/ml	34.4	27.5	41.3	BioMerieux Vidas
	mU/ml	36.1	27.8	44.4	Siemens Centaur XP/XPT/Classic
	mU/ml	54.0	43.2	64.8	Siemens Immulite 2000
	mU/ml	55.7	44.6	66.8	Siemens Immulite 1000
	mU/ml	25.9	20.7	31.1	Beckman Dxl800
	mU/ml	37.9	30.3	45.5	Roche Elecsys
	mU/ml	44.3	35.4	53.2	Diasorin Liaison
	mU/ml	38.1	30.5	45.7	Roche Modular E170
	mU/ml	26.4	21.1	31.7	Beckman Access
	mU/ml	33.3	26.6	40.0	Tosoh Series
	mU/ml	39.8	31.8	47.8	Vitros ECi
	mU/ml	38.1	30.5	45.7	Roche Cobas E411
	mU/ml	38.1	30.5	45.7	Roche Cobas 6000/8000
	mU/ml	37.0	29.6	44.4	SNIBE Maglumi Analysers
	mU/ml	33.8	27.0	40.6	Fujirebio Lumipulse G Series
mU/ml	36.2	27.9	44.5	Siemens Centaur CP	
Oestradiol	pmol/l	1233	986	1480	Abbott Architect
	pg/ml	335	268	402	
	pmol/l	2477	1982	2972	BioMerieux Vidas
	pg/ml	674	539	809	
	pmol/l	2241	1389	3093	Siemens Centaur XP/XPT/Classic
	pg/ml	610	378	842	
	pmol/l	2047	1638	2456	Siemens Immulite 2000/2500
	pg/ml	557	446	668	
	pmol/l	2255	1804	2706	Siemens Immulite 1000
	pg/ml	613	491	735	
	pmol/l	2030	1624	2436	Beckman Dxl800
	pg/ml	552	442	662	
	pmol/l	1399	1119	1679	Roche Elecsys (Estradiol II)
	pg/ml	381	304	458	
	pmol/l	2149	1719	2579	Beckman Access
	pg/ml	585	468	702	
pmol/l	1649	1319	1979	Tosoh (E2)	
pg/ml	449	359	539		
pmol/l	2171	1737	2605	Vitros ECi	
pg/ml	591	472	710		

## IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 1818EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Oestradiol	pmol/l	1414	1131	1697	Roche Cobas 6000/8000 (Estradiol II)
	pg/ml	385	308	462	
	pmol/l	1407	1126	1688	Roche Cobas 4000/E411 (Estradiol II)
	pg/ml	383	306	460	
	pmol/l	2241	1389	3093	Siemens Centaur XP/XPT/Classic Enhanced (eE2)
	pg/ml	610	378	842	
	pmol/l	2190	1358	3022	Siemens Centaur XP/XPT/Classic E26 III
	pg/ml	596	370	822	
	pmol/l	2892	2314	3470	SNIBE Maglumi Analysers
	pg/ml	787	629	945	
	pmol/l	1683	1346	2020	Tosoh (iE2-hsE2)
	pg/ml	458	366	550	
	pmol/l	2382	1477	3287	Siemens Centaur CP
	pg/ml	648	402	894	
	pmol/l	2205	1367	3043	Siemens Centaur CP Enhanced (eE2)
	pg/ml	600	372	828	
	pmol/l	1951	1561	2341	Fujirebio Lumipulse G Series
	pg/ml	531	425	637	
pmol/l	1416	1133	1699	Roche Cobas 6000/8000 (Estradiol III)	
pg/ml	385	308	462		
pmol/l	1374	1099	1649	Roche Elecsys (Estradiol III)	
pg/ml	374	299	449		
pmol/l	1418	1134	1702	Roche Cobas 4000/E411 (Estradiol III)	
pg/ml	386	308	464		
pmol/l	1410	1128	1692	Roche Modular E170 (Estradiol III)	
pg/ml	384	307	461		
Paracetamol	mmol/l	0.574	0.459	0.689	Vitros
	mg/l	86.8	69.4	104	
	mmol/l	0.501	0.401	0.601	Abbott Architect
	mg/l	75.8	60.7	90.9	
	mmol/l	0.463	0.370	0.556	Roche Cobas 6000/8000
	mg/l	70.1	56.0	84.2	
	mmol/l	0.529	0.420	0.630	Gravimetric
	mg/l	80.0	63.5	95.3	
Phenobarbital	µmol/l	121	96.8	145	Abbott Architect
	µg/ml	28.1	22.5	33.7	
	µmol/l	112	89.6	134	Roche Cobas 6000/8000
	µg/ml	26.0	20.8	31.2	
	µmol/l	120	96.0	144	Siemens Immulite 2000/2500
	µg/ml	27.8	22.3	33.3	
	µmol/l	125	100	150	Beckman AU400/600/640/2700/5400
	µg/ml	29.0	23.2	34.8	
	µmol/l	147	107	187	Siemens Centaur XP/XPT/Classic
	µg/ml	34.1	24.9	43.3	
	µmol/l	112	89.6	134	Roche Integra
	µg/ml	26.0	20.8	31.2	

## IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 1818EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods	
			low	high		
Phenobarbital	µmol/l	116	92.8	139	Siemens Immulite 1000	
	µg/ml	26.9	21.5	32.3		
	µmol/l	118	94.4	142	Beckman DxC	
	µg/ml	27.4	21.9	32.9		
Phenytoin	µmol/l	121	96.8	145	Gravimetric	
	µg/ml	28.1	22.5	33.6		
	µmol/l	90.1	72.1	108	Abbott Architect	
	µg/ml	22.8	18.2	27.4		
	µmol/l	114	88.9	139	Siemens Centaur XP/XPT/Classic	
	µg/ml	28.8	22.5	35.1		
	µmol/l	101	80.8	121	Siemens Dimension	
	µg/ml	25.5	20.4	30.6		
	µmol/l	87.4	69.9	105	Siemens Immulite 2000/2500	
	µg/ml	22.1	17.6	26.6		
	µmol/l	91.7	73.4	110	Siemens Immulite 1000	
	µg/ml	23.2	18.5	27.9		
	µmol/l	90.7	72.6	109	Roche Integra	
	µg/ml	22.9	18.3	27.5		
	µmol/l	92.3	73.8	111	Vitros	
	µg/ml	23.3	18.6	28.0		
Primidone	µmol/l	91.9	73.5	110	Roche Cobas E411	
	µg/ml	23.2	18.6	27.8		
	µmol/l	90.7	72.6	109	Roche Cobas 6000/8000	
	µg/ml	22.9	18.3	27.5		
	µmol/l	91.2	73.0	109	Beckman DxC	
	µg/ml	23.0	18.4	27.6		
	µmol/l	99.8	79.8	120	Gravimetric	
	µg/ml	25.2	20.1	30.3		
	Progesterone	µmol/l	32.7	26.2	39.2	Gravimetric
		µg/ml	7.14	5.72	8.56	
Progesterone	nmol/l	87.0	69.6	104	Abbott Architect	
	ng/ml	27.2	21.8	32.6		
	nmol/l	135	108	162	BioMerieux Vidas	
	ng/ml	42.3	33.8	50.8		
	nmol/l	69.0	49.0	89.0	Siemens Centaur XP/XPT/Classic	
	ng/ml	21.6	15.3	27.9		
	nmol/l	64.4	51.5	77.3	Siemens Immulite 2000/2500	
	ng/ml	20.2	16.1	24.3		
	nmol/l	76.7	61.4	92.0	Siemens Immulite 1000	
	ng/ml	24.0	19.2	28.8		
	nmol/l	95.6	76.5	115	Beckman Dxl Prog Cal 33555	
	ng/ml	29.9	23.9	35.9		
nmol/l	95.5	76.4	115	Roche Elecsys (Prog. II)		
ng/ml	29.9	23.9	35.9			
nmol/l	98.1	78.5	118	Beckman Access Prog Cal 33555		
ng/ml	30.7	24.6	36.8			

## IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 1818EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Progesterone	nmol/l	105	84.0	126	Tosoh Series
	ng/ml	32.9	26.3	39.5	
	nmol/l	105	84.0	126	Vitros ECI
	ng/ml	32.9	26.3	39.5	
	nmol/l	93.7	75.0	112	Roche Cobas 4000/e411 (Prog. II)
	ng/ml	29.3	23.5	35.1	
	nmol/l	95.6	76.5	115	Roche Cobas 6000/8000 (Prog. II)
	ng/ml	29.9	23.9	35.9	
	nmol/l	76.1	60.9	91.3	Diasorin Liaison
	ng/ml	23.8	19.1	28.5	
	nmol/l	123	98.4	148	SNIBE Maglumi Analysers
	ng/ml	38.5	30.8	46.2	
	nmol/l	87.4	69.9	105	Beckman Dxl Prog DE Cal A80773
	ng/ml	27.4	21.9	32.9	
	nmol/l	86.7	69.4	104	Beckman Access Prog DE Cal A80773
	ng/ml	27.1	21.7	32.5	
	nmol/l	69.7	49.5	89.9	Siemens Centaur CP
	ng/ml	21.8	15.5	28.1	
	nmol/l	100	80.0	120	Fujirebio Lumipulse G Series
	ng/ml	31.3	25.0	37.6	
nmol/l	95.2	76.2	114	Roche Cobas 6000/8000 (Prog. III)	
ng/ml	29.8	23.9	35.7		
nmol/l	95.7	76.6	115	Roche Elecsys (Prog. III)	
ng/ml	30.0	24.0	36.0		
nmol/l	94.9	75.9	114	Roche Cobas 4000/e411 (Prog. III)	
ng/ml	29.7	23.8	35.6		
nmol/l	95.0	76.0	114	Roche Modular E170 (Prog. III)	
ng/ml	29.7	23.8	35.6		
Prolactin	µU/ml	1248	998	1498	Abbott Architect
	µU/ml	1422	1138	1706	BioMerieux Vidas
	µU/ml	1049	787	1311	Siemens Centaur XP/XPT/Classic
	µU/ml	1143	914	1372	Siemens Immulite 2000/2500
	µU/ml	1183	946	1420	Siemens Immulite 1000
	µU/ml	1035	828	1242	Beckman Dxl800
	µU/ml	1353	1082	1624	Roche Elecsys
	µU/ml	1293	1034	1552	Diasorin Liaison
	µU/ml	1296	1037	1555	Roche Modular E170
	µU/ml	1058	846	1270	Beckman Access
	µU/ml	1233	986	1480	Tosoh Series
	µU/ml	1075	860	1290	Vitros ECI
	µU/ml	1313	1050	1576	Roche Elecsys/E170/Cobas 6000/8000 PRLII
	µU/ml	1163	930	1396	Immunotech IRMA
	µU/ml	1368	1094	1642	Roche Cobas E411
	µU/ml	1319	1055	1583	Roche Cobas 6000/8000
µU/ml	1367	1094	1640	SNIBE Maglumi Analysers	

## IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 1818EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Prolactin	µU/ml	1439	1151	1727	Fujirebio Lumipulse G Series
	µU/ml	1205	964	1446	Abbott Architect restandardised
	µU/ml	1008	756	1260	Siemens Centaur CP
PSA Free	ng/ml = µg/l	24.4	18.3	30.5	Abbott Architect
	ng/ml = µg/l	25.4	19.1	31.8	BioMerieux Vidas
	ng/ml = µg/l	24.9	18.7	31.1	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	20.0	15.0	25.0	Siemens Dimension
	ng/ml = µg/l	21.2	15.9	26.5	Siemens Immulite 2000/2500
	ng/ml = µg/l	20.7	15.5	25.9	Siemens Immulite 1000
	ng/ml = µg/l	28.1	21.1	35.1	Beckman DXI standardised to Hybritech
	ng/ml = µg/l	23.3	17.5	29.1	Roche Elecsys
	ng/ml = µg/l	7.69	5.77	9.61	Diasorin Liaison
	ng/ml = µg/l	22.9	17.2	28.6	Roche Modular E170
	ng/ml = µg/l	30.3	22.7	37.9	Beckman Access standardised to Hybritech
	ng/ml = µg/l	22.2	16.7	27.8	Tosoh Series
	ng/ml = µg/l	24.1	18.1	30.1	Roche Cobas E411
	ng/ml = µg/l	23.1	17.3	28.9	Roche Cobas 6000/8000
	ng/ml = µg/l	22.8	17.1	28.5	SNIBE Maglumi Analysers
ng/ml = µg/l	21.5	16.1	26.9	Ortho Vitros 3600/5600/ECi PSA II	
ng/ml = µg/l	18.2	13.7	22.8	Fujirebio Lumipulse G Series	
PSA Total	ng/ml = µg/l	25.5	19.1	31.9	Abbott Architect
	ng/ml = µg/l	28.7	21.5	35.9	BioMerieux Vidas
	ng/ml = µg/l	28.2	21.2	35.3	bioMerieux VIDAS TPSA
	ng/ml = µg/l	26.0	19.5	32.5	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	26.0	19.5	32.5	Siemens Immulite 2000/2500 1st generation
	ng/ml = µg/l	22.5	16.9	28.1	Siemens Immulite 1000 3rd generation
	ng/ml = µg/l	26.0	19.5	32.5	Siemens Immulite 2000/2500 3rd generation
	ng/ml = µg/l	23.0	17.3	28.8	Siemens Immulite 1000 1st generation
	ng/ml = µg/l	27.3	20.5	34.1	Beckman Dxl standardisd to Hybritech
	ng/ml = µg/l	21.7	16.3	27.1	Beckman Dxl800 standardised to WHO IRP96/670
	ng/ml = µg/l	30.6	23.0	38.3	Roche Elecsys
	ng/ml = µg/l	8.97	6.73	11.2	Diasorin Liaison
	ng/ml = µg/l	30.7	23.0	38.4	Roche Modular E170
	ng/ml = µg/l	27.6	20.7	34.5	Beckman Access standardised to Hybritech
	ng/ml = µg/l	28.1	21.1	35.1	Beckman Access standardised to WHO IRP96/670
	ng/ml = µg/l	17.9	13.4	22.4	Tosoh Series
	ng/ml = µg/l	29.5	22.1	36.9	Vitros ECi
	ng/ml = µg/l	24.4	18.3	30.5	CIS RIA Coated tube
	ng/ml = µg/l	31.2	23.4	39.0	Roche Cobas E411
	ng/ml = µg/l	30.8	23.1	38.5	Roche Cobas 6000/8000
ng/ml = µg/l	33.4	25.1	41.8	SNIBE Maglumi Analysers	
ng/ml = µg/l	23.1	17.3	28.9	Fujirebio Lumipulse G Series	
ng/ml = µg/l	29.6	22.2	37.0	Ortho Vitros 3600/5600/ECi PSA II	
ng/ml = µg/l	26.1	19.6	32.6	Siemens Centaur CP	
Salicylic Acid	mmol/l	2.68	2.14	3.22	Roche Integra
	mg/dl	37.0	29.6	44.4	



## IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 1818EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods	
			low	high		
Salicylic Acid	mmol/l	2.79	2.23	3.35	Abbott Architect	
	mg/dl	38.5	30.8	46.2		
	mmol/l	2.95	2.36	3.54	Beckman DxC	
	mg/dl	40.7	32.6	48.8		
	mmol/l	2.88	2.30	3.46	Gravimetric	
	mg/dl	39.8	31.8	47.8		
SHBG	nmol/l	46.2	37.0	55.4	Siemens Centaur XP/XPT/Classic	
	nmol/l	33.3	26.6	40.0	Siemens Immulite 1000	
	nmol/l	36.1	28.9	43.3	Siemens Immulite 2000/2500	
	nmol/l	41.1	32.9	49.3	Roche Elecsys	
	nmol/l	35.4	28.3	42.5	Abbott Architect	
	nmol/l	38.6	30.9	46.3	Roche Cobas E411	
	nmol/l	38.7	31.0	46.4	Roche Cobas 6000/8000	
	nmol/l	35.4	28.3	42.5	Beckman Dxl800	
	nmol/l	30.1	24.1	36.1	SNIBE Maglumi Analysers	
T Uptake	%U	38.7	31.7	45.7	Siemens Immulite 2000	
Testosterone	nmol/l	30.3	24.2	36.4	Abbott Architect	
	ng/ml	8.73	6.97	10.5		
	ng/dl	873	697	1049		
	nmol/l	24.6	19.7	29.5	BioMerieux Vidas	
		ng/ml	7.08	5.67		8.49
		ng/dl	708	567		849
	nmol/l	25.8	18.8	32.8	Siemens Centaur XP/XPT/Classic	
		ng/ml	7.43	5.42		9.44
		ng/dl	743	542		944
	nmol/l	31.1	24.9	37.3	CIS RIA Coated tube	
		ng/ml	8.96	7.17		10.8
		ng/dl	896	717		1075
	nmol/l	36.4	29.1	43.7	Siemens Immulite 2000/2500	
		ng/ml	10.5	8.38		12.6
		ng/dl	1048	838		1258
	nmol/l	47.4	37.9	56.9	Siemens Immulite 1000	
		ng/ml	13.7	10.9		16.5
		ng/dl	1365	1092		1638
	nmol/l	25.4	20.3	30.5	Beckman Dxl800	
		ng/ml	7.32	5.85		8.79
ng/dl		732	585	879		
nmol/l	26.9	21.5	32.3	Beckman Access		
	ng/ml	7.75	6.19		9.31	
	ng/dl	775	619		931	
nmol/l	45.3	36.2	54.4	Tosoh Series		
	ng/ml	13.0	10.4		15.6	
	ng/dl	1305	1043		1567	
nmol/l	40.4	32.3	48.5	Vitros ECi		
	ng/ml	11.6	9.30		13.9	
	ng/dl	1164	930		1398	

## IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 1818EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Testosterone	nmol/l	30.2	24.2	36.2	Roche Cobas 6000 Test 2
	ng/ml	8.70	6.97	10.4	
	ng/dl	870	697	1043	
	nmol/l	30.1	24.1	36.1	Roche Elecsys Test II
	ng/ml	8.67	6.94	10.4	
	ng/dl	867	694	1040	
	nmol/l	30.7	24.6	36.8	Roche Modular E170 Test II
	ng/ml	8.84	7.08	10.6	
	ng/dl	884	708	1060	
	nmol/l	30.0	24.0	36.0	Roche Cobas 4000/e411 Test II
	ng/ml	8.64	6.91	10.4	
	ng/dl	864	691	1037	
	nmol/l	30.3	24.2	36.4	SNIBE Maglumi Analysers
	ng/ml	8.73	6.97	10.5	
	ng/dl	873	697	1049	
	nmol/l	30.5	24.4	36.6	Abbott Architect 2nd Generation
	ng/ml	8.78	7.03	10.5	
	ng/dl	878	703	1053	
	nmol/l	24.8	18.1	31.5	Siemens Centaur CP
	ng/ml	7.14	5.21	9.07	
ng/dl	714	521	907		
nmol/l	25.1	20.1	30.1	BioMerieux Vidas Testosterone II	
ng/ml	7.23	5.79	8.67		
ng/dl	723	579	867		
nmol/l	26.2	19.1	33.3	Siemens Centaur TST II	
ng/ml	7.55	5.51	9.59		
ng/dl	755	551	959		
Theophylline	µmol/l	143	114	172	Siemens Centaur XP/XPT/Classic
	µg/ml	25.8	20.5	31.1	
	µmol/l	163	130	196	Siemens Dimension
	µg/ml	29.4	23.4	35.4	
	µmol/l	157	126	188	Roche Integra
	µg/ml	28.3	22.7	33.9	
	µmol/l	140	112	168	Abbott Architect
	µg/ml	25.2	20.2	30.2	
	µmol/l	149	119	179	Roche Cobas 6000/8000
	µg/ml	26.8	21.4	32.2	
	µmol/l	155	124	186	Beckman DxC
	µg/ml	27.9	22.3	33.5	
	µmol/l	144	115	173	Beckman AU400/600/640/2700/5400
	µg/ml	25.9	20.7	31.1	
µmol/l	166	133	199	Gravimetric	
µg/ml	29.9	24.0	35.9		
Thyroglobulin	ng/ml	43.6	32.7	54.5	Siemens Immulite 1000
	ng/ml	39.4	29.6	49.3	Siemens Immulite 2000
	ng/ml	64.2	48.2	80.3	Roche Elecsys

## IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 1818EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Range					
Analyte	unit	Target	low	high	methods
Thyroglobulin	ng/ml	61.2	45.9	76.5	Beckman Dxl800
	ng/ml	65.7	49.3	82.1	Roche Cobas E411
	ng/ml	22.0	16.5	27.5	Diesse Chorus
	ng/ml	65.1	48.8	81.4	Roche Cobas 6000/8000
	ng/ml	61.5	46.1	76.9	Beckman Access
	ng/ml	45.9	34.4	57.4	SNIBE Maglumi Analysers
	ng/ml	69.0	51.8	86.3	Tosoh Series
	ng/ml	64.1	48.1	80.1	Roche Cobas 6000 TGII
	ng/ml	65.3	49.0	81.6	Roche Elecsys TGII
	ng/ml	65.3	49.0	81.6	Roche Cobas 4000/E411 TGII
	ng/ml	60.8	45.6	76.0	Roche Modular E170 TGII
Thyroid Stimulating Hormone	µU/ml = mIU/l	16.0	12.8	19.2	Abbott Architect
	µU/ml = mIU/l	18.8	15.0	22.6	bioMerieux VIDAS TSH
	µU/ml = mIU/l	16.2	13.0	19.4	bioMerieux VIDAS TSH3 Ultrasensitive
	µU/ml = mIU/l	20.3	13.8	26.8	Siemens Centaur XP/XPT/Classic
	µU/ml = mIU/l	19.6	15.7	23.5	CIS IRMA
	µU/ml = mIU/l	20.0	13.6	26.4	Siemens Centaur XP/XPT/Classic 3rd Generation
	µU/ml = mIU/l	18.5	14.8	22.2	Siemens Immulite 2000/2500
	µU/ml = mIU/l	18.4	14.7	22.1	Siemens Immulite 1000
	µU/ml = mIU/l	17.2	13.8	20.6	Beckman Dxl800 Fast TSH
	µU/ml = mIU/l	17.5	14.0	21.0	Beckman Dxl800
	µU/ml = mIU/l	18.9	15.1	22.7	Roche Elecsys
	µU/ml = mIU/l	22.8	18.2	27.4	Diasorin Liaison
	µU/ml = mIU/l	18.7	15.0	22.4	Roche Modular E170
	µU/ml = mIU/l	17.0	13.6	20.4	Beckman Access Fast TSH
	µU/ml = mIU/l	17.4	13.9	20.9	Beckman Access hyperTSH 3rd Generation
	µU/ml = mIU/l	19.7	15.8	23.6	Tosoh Series
	µU/ml = mIU/l	26.2	21.0	31.4	Vitros ECi
	µU/ml = mIU/l	19.0	15.2	22.8	Roche Cobas E411
	µU/ml = mIU/l	18.9	15.1	22.7	Roche Cobas 6000/8000
	µU/ml = mIU/l	17.0	13.6	20.4	Beckman Dxl800 Hyper TSH
	µU/ml = mIU/l	17.7	14.2	21.2	Siemens Dimension Vista LOCI
µU/ml = mIU/l	21.2	17.0	25.4	SNIBE Maglumi Analysers	
µU/ml = mIU/l	20.0	13.6	26.4	Siemens Centaur XP/XPT/Classic TSH3-Ultra	
µU/ml = mIU/l	19.7	13.4	26.0	Siemens Centaur CP	
µU/ml = mIU/l	19.5	13.3	25.7	Siemens Centaur CP TSH3-Ultra	
µU/ml = mIU/l	17.1	13.7	20.5	Beckman Dxl 600/800 Access (3rd IS)	
Tobramycin	µmol/l	10.3	8.24	12.4	Gravimetric
	µg/ml	4.82	3.86	5.80	
Total Beta hCG	mU/ml=IU/l	210	168	252	Abbott Architect
	IU/ml	0.210	0.168	0.252	
	mU/ml=IU/l	536	429	643	BioMerieux Vidas
	IU/ml	0.536	0.429	0.643	
	mU/ml=IU/l	187	112	262	Siemens Centaur XP/XPT/Classic
	IU/ml	0.187	0.112	0.262	
	mU/ml=IU/l	484	387	581	Siemens Dimension
	IU/ml	0.484	0.387	0.581	

## IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 1818EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Total Beta hCG	mU/ml=IU/l	599	479	719	Siemens Immulite 2000
	IU/ml	0.599	0.479	0.719	
	mU/ml=IU/l	609	487	731	Siemens Immulite 1000
	IU/ml	0.609	0.487	0.731	
	mU/ml=IU/l	203	162	244	Beckman DxI800
	IU/ml	0.203	0.162	0.244	
	mU/ml=IU/l	207	166	248	Diasorin Liaison
	IU/ml	0.207	0.166	0.248	
	mU/ml=IU/l	289	231	347	Roche Cobas Core EIA
	IU/ml	0.289	0.231	0.347	
	mU/ml=IU/l	198	158	238	Beckman Access
	IU/ml	0.198	0.158	0.238	
	mU/ml=IU/l	498	398	598	Tosoh Series
	IU/ml	0.498	0.398	0.598	
	mU/ml=IU/l	538	430	646	Vitros ECI
	IU/ml	0.538	0.430	0.646	
	mU/ml=IU/l	333	266	400	Roche STAT (Intact)
	IU/ml	0.333	0.266	0.400	
	mU/ml=IU/l	287	230	344	Roche hCG+Beta
	IU/ml	0.287	0.230	0.344	
mU/ml=IU/l	428	342	514	SNIBE Maglumi Analysers	
IU/ml	0.428	0.342	0.514		
mU/ml=IU/l	173	138	208	Fujirebio Lumipulse G Series	
IU/ml	0.173	0.138	0.208		
mU/ml=IU/l	216	173	259	Radiometer AQT90 Flex	
IU/ml	0.216	0.173	0.259		
mU/ml=IU/l	198	158	238	Beckman Access Total BhCG (5th IS)	
IU/ml	0.198	0.158	0.238		
mU/ml=IU/l	207	166	248	Beckman DxI Total BhCG (5th IS)	
IU/ml	0.207	0.166	0.248		
mU/ml=IU/l	188	113	263	Siemens Centaur CP	
IU/ml	0.188	0.113	0.263		
Total T3	nmol/l	5.28	3.96	6.60	Abbott Architect
	ng/ml	3.44	2.58	4.30	
	ng/dl	344	258	430	
	nmol/l	6.37	4.78	7.96	BioMerieux Vidas
	ng/ml	4.15	3.11	5.19	
	ng/dl	415	311	519	
	nmol/l	7.45	5.59	9.31	Siemens Centaur XP/XPT/Classic
	ng/ml	4.85	3.64	6.06	
	ng/dl	485	364	606	
	nmol/l	6.11	4.58	7.64	Siemens Immulite 2000/2500
	ng/ml	3.98	2.98	4.98	
	ng/dl	398	298	498	
	nmol/l	6.24	4.68	7.80	Siemens Immulite 1000
	ng/ml	4.06	3.05	5.07	
ng/dl	406	305	507		

## IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 1818EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Total T3	nmol/l	5.36	4.02	6.70	Beckman DxI800
	ng/ml	3.49	2.62	4.36	
	ng/dl	349	262	436	
	nmol/l	6.63	4.97	8.29	Roche Elecsys
	ng/ml	4.32	3.24	5.40	
	ng/dl	432	324	540	
	nmol/l	5.65	4.24	7.06	Diasorin Liaison
	ng/ml	3.68	2.76	4.60	
	ng/dl	368	276	460	
	nmol/l	6.40	4.80	8.00	Roche Modular E170
	ng/ml	4.17	3.12	5.22	
	ng/dl	417	312	522	
	nmol/l	5.52	4.14	6.90	Beckman Access
	ng/ml	3.59	2.70	4.48	
	ng/dl	359	270	448	
	nmol/l	5.99	4.49	7.49	Tosoh Series
	ng/ml	3.90	2.92	4.88	
	ng/dl	390	292	488	
	nmol/l	7.29	5.47	9.11	Vitros ECi
	ng/ml	4.75	3.56	5.94	
	ng/dl	475	356	594	
	nmol/l	5.03	3.77	6.29	CIS RIA Coated tube
	ng/ml	3.27	2.45	4.09	
	ng/dl	327	245	409	
nmol/l	6.63	4.97	8.29	Roche Cobas E411	
ng/ml	4.32	3.24	5.40		
ng/dl	432	324	540		
nmol/l	6.40	4.80	8.00	Roche Cobas 6000/8000	
ng/ml	4.17	3.12	5.22		
ng/dl	417	312	522		
nmol/l	6.27	4.70	7.84	ELISA	
ng/ml	4.08	3.06	5.10		
ng/dl	408	306	510		
nmol/l	8.57	6.43	10.7	SNIBE Maglumi Analysers	
ng/ml	5.58	4.19	6.97		
ng/dl	558	419	697		
nmol/l	7.97	5.98	9.96	Siemens Centaur CP	
ng/ml	5.19	3.89	6.49		
ng/dl	519	389	649		
Total T4	nmol/l	203	152	254	Abbott Architect
	µg/dl	15.8	11.9	19.7	
	ng/ml	158	119	197	
	nmol/l	236	177	295	BioMerieux Vidas
	µg/dl	18.4	13.8	23.0	
	ng/ml	184	138	230	

## IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 1818EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Total T4	nmol/l	219	153	285	Siemens Centaur XP/XPT/Classic
	µg/dl	17.1	12.0	22.2	
	ng/ml	171	120	222	
	nmol/l	211	158	264	Siemens Immulite 2000/2500
	µg/dl	16.5	12.3	20.7	
	ng/ml	165	123	207	
	nmol/l	222	167	278	Siemens Immulite 1000
	µg/dl	17.3	13.0	21.6	
	ng/ml	173	130	216	
	nmol/l	220	165	275	Beckman Dxl800
	µg/dl	17.2	12.9	21.5	
	ng/ml	172	129	215	
	nmol/l	186	140	233	Roche Elecsys
	µg/dl	14.5	10.9	18.1	
	ng/ml	145	109	181	
	nmol/l	196	147	245	Diasorin Liaison
	µg/dl	15.3	11.5	19.1	
	ng/ml	153	115	191	
	nmol/l	191	143	239	Roche Modular E170
	µg/dl	14.9	11.2	18.6	
	ng/ml	149	112	186	
	nmol/l	233	175	291	Beckman Access
	µg/dl	18.2	13.7	22.7	
	ng/ml	182	137	227	
	nmol/l	200	150	250	Tosoh Series
	µg/dl	15.6	11.7	19.5	
	ng/ml	156	117	195	
	nmol/l	220	165	275	Vitros ECI
	µg/dl	17.2	12.9	21.5	
	ng/ml	172	129	215	
nmol/l	260	195	325	CIS RIA Coated tube	
µg/dl	20.3	15.2	25.4		
ng/ml	203	152	254		
nmol/l	191	143	239	Roche Cobas E411	
µg/dl	14.9	11.2	18.6		
ng/ml	149	112	186		
nmol/l	186	140	233	Roche Cobas 6000/8000	
µg/dl	14.5	10.9	18.1		
ng/ml	145	109	181		
nmol/l	164	123	205	Immunotech IRMA	
µg/dl	12.8	9.59	16.0		
ng/ml	128	95.9	160		
nmol/l	198	149	248	SNIBE Maglumi Analysers	
µg/dl	15.4	11.6	19.2		
ng/ml	154	116	192		

## IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 1818EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Analyte	unit	Target	Range		methods
			low	high	
Total T4	nmol/l	232	162	302	Siemens Centaur CP
	µg/dl	18.1	12.7	23.5	
	ng/ml	181	127	235	
Valproic Acid	µmol/l	893	714	1072	Abbott Architect
	µg/ml	129	103	155	
	µmol/l	936	749	1123	Siemens Centaur XP/XPT/Classic
	µg/ml	135	108	162	
	µmol/l	889	711	1067	Siemens Dimension
	µg/ml	128	103	153	
	µmol/l	960	768	1152	Siemens Immulite 2000/2500
	µg/ml	139	111	167	
	µmol/l	961	769	1153	Siemens Immulite 1000
	µg/ml	139	111	167	
	µmol/l	895	716	1074	Roche Integra
	µg/ml	129	103	155	
	µmol/l	890	712	1068	Vitros
	µg/ml	128	103	153	
	µmol/l	952	762	1142	Roche Cobas E411
	µg/ml	137	110	164	
	µmol/l	899	719	1079	Roche Cobas 6000/8000
	µg/ml	130	104	156	
	µmol/l	852	682	1022	Beckman DxC
	µg/ml	123	98.4	148	
µmol/l	994	795	1193	Beckman AU400/600/640/2700/5400	
µg/ml	143	115	171		
µmol/l	909	727	1091	Siemens ADVIA 1200/1650/1800/2400	
µg/ml	131	105	157		
µmol/l	1116	893	1339	Gravimetric	
µg/ml	161	129	193		
Vancomycin	µmol/l	11.6	9.28	13.9	Roche Integra
	µg/ml	17.2	13.8	20.6	
	µmol/l	10.8	8.64	13.0	Abbott Architect
	µg/ml	16.0	12.8	19.2	
	µmol/l	8.35	6.68	10.0	Siemens Centaur XP/XPT/Classic
	µg/ml	12.4	9.92	14.9	
	µmol/l	9.82	7.86	11.8	Siemens Dimension
	µg/ml	14.6	11.7	17.5	
	µmol/l	10.0	8.00	12.0	Roche Cobas 6000/8000
	µg/ml	14.9	11.9	17.9	
	µmol/l	9.91	7.93	11.9	Beckman DxC
	µg/ml	14.7	11.8	17.6	
	µmol/l	10.3	8.24	12.4	Thermo Scientific QMS Vancomycin
	µg/ml	15.3	12.2	18.4	
µmol/l	10.8	8.64	13.0	Gravimetric	
µg/ml	16.0	12.8	19.3		
Vitamin B12	pmol/l	735	588	882	Abbott Architect
	pg/ml	996	797	1195	

## IMMUNOASSAY PREMIUM - LEVEL 3 (IA PREMIUM 3)

Cat. No. IA2640 / IA2633 Lot No. 1818EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2021-05-28

Range					
Analyte	unit	Target	low	high	methods
Vitamin B12	pmol/l	858	644	1072	Siemens Centaur XP/XPT/Classic
	pg/ml	1163	872	1454	
	pmol/l	668	534	802	Siemens Immulite 2000
	pg/ml	905	724	1086	
	pmol/l	702	562	842	Beckman Dxl800
	pg/ml	951	762	1140	
	pmol/l	819	655	983	Roche Elecsys
	pg/ml	1110	888	1332	
	pmol/l	803	642	964	Roche Modular E170
	pg/ml	1088	870	1306	
	pmol/l	711	569	853	Beckman Access
	pg/ml	963	771	1155	
	pmol/l	958	766	1150	Tosoh Series
	pg/ml	1298	1038	1558	
	pmol/l	662	530	794	Vitros ECi
	pg/ml	897	718	1076	
	pmol/l	834	667	1001	MP Biomedicals RIA
	pg/ml	1130	904	1356	
	pmol/l	788	630	946	Roche Cobas E411
	pg/ml	1068	854	1282	
pmol/l	815	652	978	Roche Cobas 6000/8000	
pg/ml	1104	883	1325		
pmol/l	724	579	869	Siemens Dimension	
pg/ml	981	785	1177		
pmol/l	718	574	862	SNIBE Maglumi Analysers	
pg/ml	973	778	1168		
pmol/l	842	632	1052	Siemens Centaur CP	
pg/ml	1141	856	1426		