

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

<b>CAT. NO.</b> IA3109	<b>GTIN:</b> 05055273207255	<b>SIZE</b> 12 x 5 ml
<b>CAT. NO.</b> IA3112	<b>GTIN:</b> 05055273207286	<b>SIZE</b> 4 x 5 ml
<b>LOT NO.</b> 2105EC	<b>EXPIRY:</b> 2024-12-28	

### 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.

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

Health and Safety Data Sheets are available on request.

### STORAGE AND STABILITY

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

ACTH should be tested immediately after the 30-minute reconstitution period. No frozen stability claim is made for ACTH, Aldosterone and C-Peptide. Only the required amount of product should be removed. After use, any residual product should NOT BE RETURNED to the original vial.

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

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

### PREPARATION

Immunoassay Premium Plus is supplied lyophilized.

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

### MATERIALS PROVIDED

Immunoassay Premium Plus - 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 Plus 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. 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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Randox Teoranta, Meenmore,  
Dungloe, Donegal,  
F94 TV06, Ireland

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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Analyte	unit	Target	Range		methods
			low	high	
17-OH-Progesterone	nmol/l	3.28	2.46	4.10	Immunotech RIA
	ng/ml	1.09	0.814	1.37	
	nmol/l	4.09	3.07	5.11	DRG ELISA
	ng/ml	1.35	1.02	1.68	
	nmol/l	4.77	3.58	5.96	DIAsource RIA
	ng/ml	1.58	1.18	1.98	
25-OH Vitamin D	nmol/l	49.7	37.3	62.1	Diasorin Liaison
	nmol/l	24.9	18.7	31.1	Siemens Centaur XP/XPT/Classic
	nmol/l	25.7	19.3	32.1	Roche Vitamin D Total
	nmol/l	25.7	19.3	32.1	Abbott Architect (3L52)
	nmol/l	99.0	74.3	124	Vitros ECi
	nmol/l	28.0	21.0	35.0	Tosoh Series
	nmol/l	34.1	25.6	42.6	BioMerieux Vidas
	nmol/l	50.9	38.2	63.6	Beckman Dxl 600/800
	nmol/l	23.7	17.8	29.6	Fujirebio Lumipulse G Series
	nmol/l	51.9	38.9	64.9	Beckman Access 25 OH Vitamin D Total
	nmol/l	25.3	19.0	31.6	Abbott Architect (5P02)/ Alinity (8P45)
	nmol/l	50.2	37.7	62.8	Diasorin Liaison XL
	nmol/l	27.9	20.9	34.9	Roche Vitamin D Total II
	nmol/l	26.2	19.7	32.8	Abbott Alinity i
nmol/l	20.2	15.2	25.3	Siemens Atellica IM	
nmol/l	25.0	18.8	31.3	Roche Vitamin D Total II e801	
ACTH	pmol/l	7.98	5.99	9.98	CIS IRMA
	pg/ml	36.3	27.2	45.4	
	pmol/l	2.41	1.81	3.01	Siemens Immulite 1000
	pg/ml	11.0	8.23	13.8	
	pmol/l	2.63	1.97	3.29	Roche Elecsys
	pg/ml	12.0	8.95	15.1	
Aldosterone	pmol/l	116	87.0	145	CIS RIA
	pg/ml	41.9	31.4	52.4	
	pmol/l	149	112	186	Immunotech RIA
	pg/ml	53.8	40.4	67.2	
	pmol/l	315	236	394	IDS iSYS
	pg/ml	114	85.1	143	
Aldosterone	pmol/l	98.9	74.2	124	Diasorin Liaison
	pg/ml	35.7	26.8	44.6	

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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Analyte	unit	Target	Range		methods
			low	high	
Alphafoetoprotein	KIU/l = IU/ml	8.17	6.54	9.80	Abbott Architect
	ng/ml	9.89	7.91	11.9	
	KIU/l = IU/ml	8.44	6.75	10.1	BioMerieux Vidas
	ng/ml	10.2	8.17	12.2	
	KIU/l = IU/ml	9.63	7.70	11.6	Siemens Centaur XP/XPT/Classic
	ng/ml	11.7	9.32	14.1	
	KIU/l = IU/ml	8.73	6.98	10.5	Siemens Immulite 2000/2500
	ng/ml	10.6	8.45	12.8	
	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	8.58	6.86	10.3	Beckman Dxl800
	ng/ml	10.4	8.30	12.5	
	KIU/l = IU/ml	9.22	7.38	11.1	Roche Elecsys
	ng/ml	11.2	8.93	13.5	
	KIU/l = IU/ml	9.15	7.32	11.0	Diasorin Liaison
	ng/ml	11.1	8.86	13.3	
	KIU/l = IU/ml	8.39	6.71	10.1	Beckman Access
	ng/ml	10.2	8.12	12.3	
	KIU/l = IU/ml	8.91	7.13	10.7	Tosoh Series
	ng/ml	10.8	8.63	13.0	
	KIU/l = IU/ml	8.93	7.14	10.7	Vitros ECi
	ng/ml	9.29	7.43	11.2	
	KIU/l = IU/ml	9.34	7.47	11.2	Roche Cobas e601/602
	ng/ml	11.3	9.04	13.6	
KIU/l = IU/ml	16.5	13.2	19.8	CIS IRMA	
ng/ml	20.0	16.0	24.0		
KIU/l = IU/ml	9.30	7.44	11.2	Roche Cobas 4000/E411	
ng/ml	11.3	9.00	13.6		
KIU/l = IU/ml	9.50	7.60	11.4	Siemens Centaur CP	
ng/ml	11.5	9.20	13.8		
KIU/l = IU/ml	7.86	6.29	9.43	Mindray CL Series	
ng/ml	9.51	7.61	11.4		
KIU/l = IU/ml	10.1	8.08	12.1	Diasorin Liaison XL	
ng/ml	12.2	9.78	14.6		
KIU/l = IU/ml	9.62	7.70	11.5	Siemens Atellica IM	
ng/ml	11.6	9.32	13.9		
KIU/l = IU/ml	8.16	6.53	9.79	Abbott Alinity i	
ng/ml	9.87	7.90	11.8		
KIU/l = IU/ml	9.47	7.58	11.4	Roche Cobas e402/e801	
ng/ml	11.5	9.17	13.8		
KIU/l = IU/ml	7.81	6.25	9.37	Tosoh AIA-CL Series	
ng/ml	9.45	7.56	11.3		
Amikacin	µmol/l	6.35	5.08	7.62	Roche Cobas 6000/8000
	µg/ml	3.72	2.97	4.47	
	µmol/l	6.09	4.87	7.31	Abbott Architect
	µg/ml	3.57	2.85	4.29	

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Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Analyte	unit	Target	Range		methods
			low	high	
Amikacin	µmol/l	6.15	4.92	7.38	Thermo Scientific QMS Amikacin
	µg/ml	3.60	2.88	4.32	
	µmol/l	6.33	5.06	7.60	Abbott Alinity
	µg/ml	3.71	2.96	4.46	
	µmol/l	6.40	5.12	7.68	Gravimetric
Androstenedione	µg/ml	3.75	3.00	4.50	
	nmol/l	3.04	2.28	3.80	Beckman Coulter RIA
	ng/ml	0.872	0.654	1.09	
	nmol/l	5.97	4.48	7.46	Siemens Immulite 2000
Beta-2-microglobulin	ng/ml	1.71	1.29	2.13	
	nmol/l	6.49	4.87	8.11	Diasorin Liaison XL
	ng/ml	1.86	1.40	2.32	
	µg/ml = mg/l	0.933	0.746	1.12	Abbott Architect
C-Peptide	µg/ml = mg/l	0.999	0.799	1.20	BioMerieux Vidas
	µg/ml = mg/l	0.847	0.678	1.02	Behring Nephelometer
	µg/ml = mg/l	0.898	0.718	1.08	Siemens Immulite 2000/2500
	µg/ml = mg/l	0.955	0.764	1.15	Tosoh Series
	µg/ml = mg/l	1.01	0.808	1.21	Roche Cobas 6000/8000
	µg/ml = mg/l	0.655	0.524	0.786	Diasorin Liaison XL
	µg/ml = mg/l	0.772	0.618	0.926	Siemens Atellica CH
	µg/ml = mg/l	0.932	0.746	1.12	Abbott Alinity
C-Peptide	nmol/l	0.535	0.401	0.669	Siemens Immulite 2000/2500
	ng/ml	1.62	1.21	2.03	
	nmol/l	0.664	0.498	0.830	Roche Elecsys
	ng/ml	2.00	1.50	2.50	
	nmol/l	0.694	0.521	0.868	Roche Cobas e601/602
	ng/ml	2.10	1.57	2.63	
	nmol/l	0.665	0.499	0.831	Diasorin Liaison
	ng/ml	2.01	1.51	2.51	
	nmol/l	0.693	0.520	0.866	Roche Cobas 4000/E411
	ng/ml	2.09	1.57	2.61	
	nmol/l	0.610	0.458	0.763	Abbott Architect
	ng/ml	1.84	1.38	2.30	
	nmol/l	0.448	0.336	0.560	Siemens Centaur XP/XPT/Classic
	ng/ml	1.35	1.01	1.69	
	nmol/l	0.612	0.459	0.765	Tosoh Series
	ng/ml	1.85	1.39	2.31	
	nmol/l	0.711	0.533	0.889	Diasorin Liaison XL
	ng/ml	2.15	1.61	2.69	
	nmol/l	0.673	0.505	0.841	Roche Cobas e402/e801
	ng/ml	2.03	1.52	2.54	
nmol/l	0.422	0.317	0.528	Siemens Atellica IM	
ng/ml	1.27	0.957	1.58		
nmol/l	0.649	0.487	0.811	Vitros ECI	
ng/ml	1.96	1.47	2.45		
nmol/l	0.717	0.538	0.896	Tosoh AIA-CL Series	
ng/ml	2.16	1.62	2.70		

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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Analyte	unit	Target	Range		methods
			low	high	
C-Peptide	nmol/l	0.451	0.338	0.564	Beckman Access
	ng/ml	1.36	1.02	1.70	
	nmol/l	0.603	0.452	0.754	Abbott Alinity i
	ng/ml	1.82	1.36	2.28	
CA 15-3	U/ml	33.3	26.6	40.0	Abbott Architect
	U/ml	22.9	18.3	27.5	BioMerieux Vidas
	U/ml	24.3	19.4	29.2	Siemens Centaur XP/XPT/Classic
	U/ml	24.2	19.4	29.0	Siemens Immulite 2000/2500
	U/ml	10.6	8.48	12.7	Beckman DxI800
	U/ml	22.6	18.1	27.1	Roche Elecsys
	U/ml	10.1	8.08	12.1	Beckman Access
	U/ml	26.9	21.5	32.3	Tosoh Series
	U/ml	19.9	15.9	23.9	Vitros ECI
	U/ml	22.2	17.8	26.6	Roche Cobas e601/602
	U/ml	22.2	17.8	26.6	Roche Cobas 4000/E411
	U/ml	24.1	19.3	28.9	Siemens Centaur CP
	U/ml	13.8	11.0	16.6	Mindray CL-2000i
	U/ml	23.8	19.0	28.6	Diasorin Liaison XL
	U/ml	26.6	21.3	31.9	Siemens Atellica IM
	U/ml	20.9	16.7	25.1	Roche Cobas e402/e801
U/ml	32.4	25.9	38.9	Abbott Alinity i	
CA 19-9	U/ml	35.9	28.7	43.1	BioMerieux Vidas
	U/ml	42.4	33.9	50.9	Siemens Centaur XP/XPT/Classic
	U/ml	44.6	35.7	53.5	Siemens Immulite 2000/2500
	U/ml	48.1	38.5	57.7	Beckman DxI800
	U/ml	23.9	19.1	28.7	Roche Elecsys
	U/ml	53.9	43.1	64.7	Beckman Access
	U/ml	23.3	18.6	28.0	Tosoh Series
	U/ml	49.0	39.2	58.8	Vitros ECI
	U/ml	73.4	58.7	88.1	Abbott Architect XR/XR2/XRL
	U/ml	23.9	19.1	28.7	Roche Cobas e601/602
	U/ml	24.9	19.9	29.9	Roche Cobas 4000/E411
	U/ml	43.8	35.0	52.6	Siemens Centaur CP
	U/ml	19.4	15.5	23.3	Mindray CL-2000i
	U/ml	46.6	37.3	55.9	Diasorin Liaison XL
	U/ml	43.3	34.6	52.0	Siemens Atellica IM
	U/ml	25.7	20.6	30.8	Roche Cobas e402/e801
U/ml	73.6	58.9	88.3	Abbott Alinity XR/XR2/XRL	
CA125	U/ml	27.2	21.8	32.6	Abbott Architect
	U/ml	19.0	15.2	22.8	BioMerieux Vidas
	U/ml	21.1	16.9	25.3	Siemens Centaur XP/XPT/Classic OV Kit
	U/ml	21.8	17.4	26.2	Siemens Centaur XP/XPT/Classic CA125 II kit
	U/ml	17.4	13.9	20.9	Siemens Immulite 2000/2500
	U/ml	21.1	16.9	25.3	Siemens Immulite 1000
U/ml	15.4	12.3	18.5	Beckman DxI800	

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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Analyte	unit	Target	Range		methods
			low	high	
CA125	U/ml	17.8	14.2	21.4	Roche Elecsys
	U/ml	16.1	12.9	19.3	Beckman Access
	U/ml	32.2	25.8	38.6	Tosoh Series
	U/ml	16.8	13.4	20.2	Vitros ECI
	U/ml	18.0	14.4	21.6	Roche Cobas 4000/E411
	U/ml	18.6	14.9	22.3	Roche Cobas e601/602
	U/ml	16.5	13.2	19.8	Fujirebio Lumipulse G Series
	U/ml	21.9	17.5	26.3	Siemens Centaur CP CA125 II kit
	U/ml	35.0	28.0	42.0	Mindray CL-2000i
	U/ml	23.2	18.6	27.8	Diasorin Liaison XL
	U/ml	25.8	20.6	31.0	Siemens Atellica IM
	U/ml	17.9	14.3	21.5	Roche Cobas e402/e801
	U/ml	27.8	22.2	33.4	Abbott Alinity i
Carbamazepine	µmol/l	15.5	12.4	18.6	Abbott Architect (CMIA)
	µg/ml	3.66	2.93	4.39	
	µmol/l	17.2	13.8	20.6	Siemens Centaur XP/XPT/Classic
	µg/ml	4.07	3.26	4.88	
	µmol/l	13.4	10.7	16.1	Siemens Dimension
	µg/ml	3.17	2.53	3.81	
	µmol/l	13.0	10.4	15.6	Siemens Immulite 2000/2500
	µg/ml	3.07	2.46	3.68	
	µmol/l	13.2	10.6	15.8	Siemens Immulite 1000
	µg/ml	3.12	2.51	3.73	
	µmol/l	15.6	12.5	18.7	Roche Integra
	µg/ml	3.69	2.96	4.42	
	µmol/l	14.2	11.4	17.0	Roche Cobas 6000/8000
	µg/ml	3.36	2.69	4.03	
	µmol/l	15.4	12.3	18.5	Beckman AU400/600/640/2700/5400
	µg/ml	3.64	2.91	4.37	
	µmol/l	14.0	11.2	16.8	Abbott Architect (PETINA)
	µg/ml	3.31	2.65	3.97	
	µmol/l	16.0	12.8	19.2	EMIT
	µg/ml	3.78	3.03	4.53	
µmol/l	14.4	11.5	17.3	Siemens Atellica CH	
µg/ml	3.40	2.72	4.08		
µmol/l	13.2	10.6	15.8	Abbott Alinity (PETINA)	
µg/ml	3.12	2.51	3.73		
µmol/l	15.4	12.3	18.5	Gravimetric	
µg/ml	3.64	2.91	4.37		
Carcinoembryonic Antigen (CEA)	ng/ml = µg/l	5.12	4.10	6.14	Abbott Architect
	ng/ml = µg/l	4.02	3.22	4.82	BioMerieux Vidas
	ng/ml = µg/l	4.90	3.92	5.88	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	7.44	5.95	8.93	CIS RIA Coated tube
	ng/ml = µg/l	5.97	4.78	7.16	Siemens Immulite 2000/2500
	ng/ml = µg/l	6.28	5.02	7.54	Siemens Immulite 1000
	ng/ml = µg/l	4.15	3.32	4.98	Beckman DxI800

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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Analyte	unit	Target	Range		methods
			low	high	
Carcinoembryonic Antigen (CEA)	ng/ml = µg/l	4.08	3.26	4.90	Roche Elecsys
	ng/ml = µg/l	3.81	3.05	4.57	Diasorin Liaison
	ng/ml = µg/l	4.34	3.47	5.21	Beckman Access
	ng/ml = µg/l	6.81	5.45	8.17	Tosoh Series
	ng/ml = µg/l	4.30	3.44	5.16	Vitros ECi
	ng/ml = µg/l	4.18	3.34	5.02	Roche Cobas e601/602
	ng/ml = µg/l	4.23	3.38	5.08	Roche Cobas 4000/E411
	ng/ml = µg/l	6.43	5.14	7.72	Fujirebio Lumipulse G Series
	ng/ml = µg/l	4.96	3.97	5.95	Siemens Centaur CP
	ng/ml = µg/l	3.63	2.90	4.36	Mindray CL-2000i
	ng/ml = µg/l	4.23	3.38	5.08	Diasorin Liaison XL
	ng/ml = µg/l	4.82	3.86	5.78	Siemens Atellica IM
	ng/ml = µg/l	4.05	3.24	4.86	Roche Cobas e402/e801
	ng/ml = µg/l	4.91	3.93	5.89	Abbott Alinity i
Cortisol	nmol/l	221	166	276	Abbott Architect
	µg/dl	7.96	5.98	9.94	
	nmol/l	150	113	188	BioMerieux Vidas
	µg/dl	5.40	4.07	6.73	
	nmol/l	212	159	265	Siemens Centaur XP/XPT/Classic
	µg/dl	7.63	5.72	9.54	
	nmol/l	177	133	221	CIS RIA
	µg/dl	6.37	4.79	7.95	
	nmol/l	184	138	230	Siemens Immulite 2000/2500
	µg/dl	6.62	4.97	8.27	
	nmol/l	195	146	244	Siemens Immulite 1000
	µg/dl	7.02	5.26	8.78	
	nmol/l	215	161	269	Beckman Dxl800
	µg/dl	7.74	5.80	9.68	
	nmol/l	196	147	245	Roche Elecsys
	µg/dl	7.06	5.29	8.83	
	nmol/l	218	164	273	Beckman Access
	µg/dl	7.85	5.90	9.80	
	nmol/l	190	143	238	Tosoh Series
	µg/dl	6.84	5.15	8.53	
nmol/l	163	122	204	Vitros ECi	
µg/dl	5.87	4.39	7.35		
nmol/l	196	147	245	Roche Cobas e601/602	
µg/dl	7.06	5.29	8.83		
nmol/l	207	155	259	Roche Cobas 4000/E411	
µg/dl	7.45	5.58	9.32		
nmol/l	232	174	290	Siemens Centaur CP	
µg/dl	8.35	6.26	10.4		
nmol/l	205	154	256	Roche Cobas 4000/e411 Gen II	
µg/dl	7.38	5.54	9.22		
nmol/l	197	148	246	Roche Cobas e601/602 Gen II	
µg/dl	7.09	5.33	8.85		

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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Analyte	unit	Target	Range		methods	
			low	high		
Cortisol	nmol/l	208	156	260	Roche Elecsys Gen II	
	µg/dl	7.49	5.62	9.36		
	nmol/l	217	163	271	Diasorin Liaison XL	
	µg/dl	7.81	5.87	9.75		
	nmol/l	248	186	310	Siemens Atellica IM	
	µg/dl	8.93	6.70	11.2		
	nmol/l	192	144	240	Roche Cobas e402/e801	
	µg/dl	6.91	5.18	8.64		
	nmol/l	212	159	265	Tosoh AIA-CL Series	
	µg/dl	7.63	5.72	9.54		
	nmol/l	218	164	273	Abbott Alinity i	
	µg/dl	7.85	5.90	9.80		
	DHEA-S	µmol/l	2.27	1.82	2.72	Abbott Architect
		µmol/l	1.78	1.42	2.14	Siemens Immulite 2000/2500
		µmol/l	1.50	1.20	1.80	Siemens Immulite 1000
		µmol/l	2.17	1.74	2.60	Beckman Dxl800
µmol/l		3.06	2.45	3.67	Roche Elecsys	
µmol/l		2.39	1.91	2.87	Beckman Access	
µmol/l		1.72	1.38	2.06	Diasorin Liaison	
µmol/l		1.98	1.58	2.38	Siemens Centaur XP/XPT/Classic	
µmol/l		2.87	2.30	3.44	Roche Cobas 4000/E411	
µmol/l		2.81	2.25	3.37	Roche Cobas e601/602	
µmol/l		1.85	1.48	2.22	Diasorin Liaison XL	
µmol/l		2.02	1.62	2.42	Siemens Atellica IM	
µmol/l		2.77	2.22	3.32	Roche Cobas e402/e801	
µmol/l		2.28	1.82	2.74	Abbott Alinity i	
Digoxin	nmol/l	0.584	0.467	0.701	Abbott Architect (CMIA)	
	ng/ml	0.456	0.365	0.547		
	nmol/l	0.618	0.494	0.742	BioMerieux Vidas	
	ng/ml	0.483	0.386	0.580		
	nmol/l	0.966	0.773	1.16	Siemens Centaur XP/XPT/Classic	
	ng/ml	0.754	0.604	0.904		
	nmol/l	0.668	0.534	0.802	Siemens Dimension	
	ng/ml	0.522	0.417	0.627		
	nmol/l	0.716	0.573	0.859	Beckman Dxl800	
	ng/ml	0.559	0.448	0.670		
	nmol/l	0.796	0.637	0.955	Roche Cobas e601/602	
	ng/ml	0.622	0.497	0.747		
	nmol/l	0.852	0.682	1.02	Beckman AU400/600/640/2700/5400	
	ng/ml	0.665	0.533	0.797		
	nmol/l	0.874	0.699	1.05	Roche Cobas 4000/E411	
	ng/ml	0.683	0.546	0.820		
	nmol/l	0.765	0.612	0.918	Roche Cobas e402/e801	
	ng/ml	0.597	0.478	0.716		
nmol/l	1.01	0.808	1.21	Siemens Atellica IM		
ng/ml	0.789	0.631	0.947			



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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Analyte	unit	Target	Range		methods
			low	high	
Digoxin	nmol/l	0.731	0.585	0.877	Abbott Alinity (CMIA)
	ng/ml	0.571	0.457	0.685	
	nmol/l	0.789	0.631	0.947	Abbott Alinity (PETINA)
	ng/ml	0.616	0.493	0.739	
Ethosuximide	nmol/l	0.896	0.717	1.08	Gravimetric
	ng/ml	0.700	0.560	0.840	
Ethosuximide	µmol/l	226	181	271	Gravimetric
	µg/ml	32.0	25.7	38.4	
Ferritin	ng/ml = µg/l	12.3	9.84	14.8	Abbott Architect
	ng/ml = µg/l	9.15	7.32	11.0	BioMerieux Vidas
	ng/ml = µg/l	9.22	7.38	11.1	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	12.3	9.84	14.8	Siemens Dimension
	ng/ml = µg/l	11.2	8.96	13.4	Siemens Immulite 2000/2500
	ng/ml = µg/l	10.6	8.48	12.7	Siemens Immulite 1000
	ng/ml = µg/l	8.52	6.82	10.2	Beckman Dxl800
	ng/ml = µg/l	13.9	11.1	16.7	Roche Elecsys/Cobas e411
	ng/ml = µg/l	11.6	9.28	13.9	Diasorin Liaison
	ng/ml = µg/l	13.5	10.8	16.2	Roche Modular E170 / Roche Cobas e601/602
	ng/ml = µg/l	8.43	6.74	10.1	Beckman Access
	ng/ml = µg/l	8.16	6.53	9.79	Tosoh Series
	ng/ml = µg/l	9.71	7.77	11.7	Vitros Eci
	ng/ml = µg/l	13.9	11.1	16.7	Roche Cobas 4000/c311
	ng/ml = µg/l	14.6	11.7	17.5	Roche Cobas c501/502/503/701/702
	ng/ml = µg/l	8.66	6.93	10.4	Siemens Centaur CP
	ng/ml = µg/l	12.7	10.2	15.2	Diasorin Liaison XL
	ng/ml = µg/l	12.9	10.3	15.5	Abbott Alinity i
ng/ml = µg/l	8.46	6.77	10.2	Siemens Atellica IM	
ng/ml = µg/l	13.7	11.0	16.4	Roche Cobas e402/e801	
Folate	nmol/l	6.02	4.58	7.46	Abbott Architect
	ng/ml	2.65	2.02	3.28	
	nmol/l	12.3	9.35	15.3	Siemens Centaur XP/XPT/Classic (enhanced kit)
	ng/ml	5.42	4.12	6.72	
	nmol/l	4.88	3.71	6.05	Siemens Immulite 2000
	ng/ml	2.15	1.64	2.66	
	nmol/l	5.12	3.89	6.35	Beckman Dxl 600 / 800 - A14208
	ng/ml	2.26	1.72	2.80	
	nmol/l	5.66	4.30	7.02	Beckman Access
	ng/ml	2.50	1.90	3.10	
	nmol/l	7.78	5.91	9.65	Tosoh Series
	ng/ml	3.43	2.61	4.25	
	nmol/l	5.13	3.90	6.36	Vitros Eci
	ng/ml	2.26	1.72	2.80	
nmol/l	5.50	4.18	6.82	Beckman Dxl 600 / 800 - A98032	
ng/ml	2.43	1.84	3.02		
nmol/l	14.5	11.0	18.0	Siemens Centaur CP (enhanced kit)	
ng/ml	6.39	4.85	7.93		

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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Analyte	unit	Target	Range		methods
			low	high	
Folate	nmol/l	5.21	3.96	6.46	Roche Folate III - 04476433
	ng/ml	2.30	1.75	2.85	
	nmol/l	4.91	3.73	6.09	Roche Elecsys Folate
	ng/ml	2.17	1.64	2.70	
	nmol/l	5.06	3.85	6.27	Roche Folate III - 07559992
	ng/ml	2.23	1.70	2.76	
	nmol/l	3.84	2.92	4.76	Diasorin Liaison XL
	ng/ml	1.69	1.29	2.09	
	nmol/l	13.9	10.6	17.2	Siemens Atellica IM
	ng/ml	6.13	4.67	7.59	
	nmol/l	6.02	4.58	7.46	Abbott Alinity i
	ng/ml	2.65	2.02	3.28	
	nmol/l	4.91	3.73	6.09	Roche Folate 07027290 e801
	ng/ml	2.17	1.64	2.70	
Free T3	pmol/l	3.01	2.26	3.76	Abbott Architect, 2 point calibration
	ng/dl	0.196	0.147	0.245	
	pg/ml	1.96	1.47	2.45	
	pmol/l	3.30	2.48	4.13	BioMerieux Vidas
	ng/dl	0.215	0.161	0.269	
	pg/ml	2.15	1.61	2.69	
	pmol/l	4.14	3.11	5.18	Siemens Centaur XP/XPT/Classic
	ng/dl	0.269	0.202	0.336	
	pg/ml	2.70	2.02	3.38	
	pmol/l	3.61	2.71	4.51	Siemens Immulite 2000/2500
	ng/dl	0.235	0.176	0.294	
	pg/ml	2.35	1.76	2.94	
	pmol/l	3.30	2.48	4.13	Siemens Immulite 1000
	ng/dl	0.215	0.161	0.269	
	pg/ml	2.15	1.61	2.69	
	pmol/l	3.65	2.74	4.56	Beckman Dxl800
	ng/dl	0.237	0.178	0.296	
	pg/ml	2.38	1.78	2.98	
	pmol/l	4.43	3.32	5.54	Roche Elecsys
	ng/dl	0.288	0.216	0.360	
	pg/ml	2.88	2.16	3.60	
	pmol/l	3.09	2.32	3.86	Diasorin Liaison
	ng/dl	0.201	0.151	0.251	
	pg/ml	2.01	1.51	2.51	
pmol/l	3.75	2.81	4.69	Beckman Access	
ng/dl	0.244	0.183	0.305		
pg/ml	2.44	1.83	3.05		
pmol/l	3.40	2.55	4.25	Tosoh Series	
ng/dl	0.221	0.166	0.276		
pg/ml	2.21	1.66	2.76		
pmol/l	7.96	5.97	9.95	Vitros ECi	
ng/dl	0.517	0.388	0.646		
pg/ml	5.18	3.89	6.47		

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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Analyte	unit	Target	Range		methods
			low	high	
Free T3	pmol/l	4.51	3.38	5.64	Roche Cobas 4000/E411
	ng/dl	0.293	0.220	0.366	
	pg/ml	2.94	2.20	3.68	
	pmol/l	4.40	3.30	5.50	Roche Cobas e601/602
	ng/dl	0.286	0.215	0.357	
	pg/ml	2.86	2.15	3.57	
	pmol/l	4.36	3.27	5.45	Siemens Centaur CP
	ng/dl	0.283	0.213	0.353	
	pg/ml	2.84	2.13	3.55	
	pmol/l	3.92	2.94	4.90	Mindray CL-2000i
	ng/dl	0.255	0.191	0.319	
	pg/ml	2.55	1.91	3.19	
	pmol/l	3.59	2.69	4.49	Sysmex HISCL Series
	ng/dl	0.233	0.175	0.291	
	pg/ml	2.34	1.75	2.93	
	pmol/l	3.39	2.54	4.24	Diasorin Liaison XL
	ng/dl	0.220	0.165	0.275	
	pg/ml	2.21	1.65	2.77	
	pmol/l	4.44	3.33	5.55	Siemens Atellica IM
	ng/dl	0.289	0.216	0.362	
	pg/ml	2.89	2.17	3.61	
	pmol/l	3.01	2.26	3.76	Abbott Alinity, 2 point cal
	ng/dl	0.196	0.147	0.245	
	pg/ml	1.96	1.47	2.45	
pmol/l	2.92	2.19	3.65	Abbott Architect, 6 point calibration	
ng/dl	0.190	0.142	0.238		
pg/ml	1.90	1.43	2.37		
pmol/l	4.30	3.23	5.38	Roche Cobas e402/e801	
ng/dl	0.280	0.210	0.350		
pg/ml	2.80	2.10	3.50		
pmol/l	2.64	1.98	3.30	Tosoh AIA-CL Series	
ng/dl	0.172	0.129	0.215		
pg/ml	1.72	1.29	2.15		
pmol/l	3.08	2.31	3.85	Abbott Alinity, 6 point cal	
ng/dl	0.200	0.150	0.250		
pg/ml	2.01	1.50	2.52		
Free T4	pmol/l	9.70	7.28	12.1	Abbott Architect
	ng/dl	0.757	0.568	0.946	
	pg/ml	7.57	5.68	9.46	
	pmol/l	8.82	6.62	11.0	Siemens Centaur XP/XPT/Classic
	ng/dl	0.688	0.516	0.860	
	pg/ml	6.88	5.16	8.60	
	pmol/l	12.0	9.00	15.0	CIS RIA Coated tube
	ng/dl	0.936	0.702	1.17	
	pg/ml	9.36	7.02	11.7	

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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Range					
Analyte	unit	Target	low	high	methods
Free T4	pmol/l	13.7	10.3	17.1	Siemens Immulite 2000/2500
	ng/dl	1.07	0.803	1.34	
	pg/ml	10.7	8.03	13.4	
	pmol/l	13.9	10.4	17.4	Siemens Immulite 1000
	ng/dl	1.08	0.811	1.35	
	pg/ml	10.8	8.11	13.5	
	pmol/l	9.61	7.21	12.0	Beckman Dxl800
	ng/dl	0.750	0.562	0.938	
	pg/ml	7.50	5.62	9.38	
	pmol/l	13.0	9.75	16.3	Roche Elecsys
	ng/dl	1.01	0.761	1.26	
	pg/ml	10.1	7.61	12.6	
	pmol/l	12.3	9.23	15.4	Diasorin Liaison
	ng/dl	0.959	0.720	1.20	
	pg/ml	9.59	7.20	12.0	
	pmol/l	9.91	7.43	12.4	Beckman Access
	ng/dl	0.773	0.580	0.966	
	pg/ml	7.73	5.80	9.66	
	pmol/l	10.6	7.95	13.3	Tosoh Series
	ng/dl	0.827	0.620	1.03	
	pg/ml	8.27	6.20	10.3	
	pmol/l	20.1	15.1	25.1	Vitros ECi
	ng/dl	1.57	1.18	1.96	
	pg/ml	15.7	11.8	19.6	
	pmol/l	10.0	7.50	12.5	BioMerieux Vidas
	ng/dl	0.780	0.585	0.975	
	pg/ml	7.80	5.85	9.75	
	pmol/l	13.3	9.98	16.6	Roche Cobas e601/602
	ng/dl	1.04	0.778	1.30	
	pg/ml	10.4	7.78	13.0	
pmol/l	12.0	9.00	15.0	Immunotech IRMA	
ng/dl	0.936	0.702	1.17		
pg/ml	9.36	7.02	11.7		
pmol/l	13.4	10.1	16.8	Roche Cobas 4000/E411	
ng/dl	1.05	0.788	1.31		
pg/ml	10.5	7.88	13.1		
pmol/l	10.7	8.03	13.4	Biomerieux Vidas FT4N Kit	
ng/dl	0.835	0.626	1.04		
pg/ml	8.35	6.26	10.4		
pmol/l	9.18	6.89	11.5	Siemens Centaur CP	
ng/dl	0.716	0.537	0.895		
pg/ml	7.16	5.37	8.95		
pmol/l	11.3	8.48	14.1	Mindray CL-2000i	
ng/dl	0.881	0.661	1.10		
pg/ml	8.81	6.61	11.0		
pmol/l	10.6	7.95	13.3	Sysmex HISCL Series	
ng/dl	0.827	0.620	1.03		
pg/ml	8.27	6.20	10.3		

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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Analyte	unit	Target	Range		methods	
			low	high		
Free T4	pmol/l	11.6	8.70	14.5	Diasorin Liaison XL	
	ng/dl	0.905	0.679	1.13		
	pg/ml	9.05	6.79	11.3		
	pmol/l	9.58	7.19	12.0	Siemens Atellica IM	
		ng/dl	0.747	0.561		0.933
		pg/ml	7.47	5.61		9.33
	pmol/l	9.36	7.02	11.7	Abbott Alinity i	
		ng/dl	0.730	0.548		0.912
		pg/ml	7.30	5.48		9.12
	pmol/l	13.1	9.83	16.4	Roche Cobas e402/e801	
		ng/dl	1.02	0.767		1.27
		pg/ml	10.2	7.67		12.7
pmol/l	11.0	8.25	13.8	Tosoh AIA-CL Series		
	ng/dl	0.858	0.644		1.07	
	pg/ml	8.58	6.44		10.7	
FSH	mU/ml	6.60	5.28	7.92	Abbott Architect	
	mU/ml	6.60	5.28	7.92	BioMerieux Vidas	
	mU/ml	7.90	6.32	9.48	Siemens Centaur XP/XPT/Classic	
	mU/ml	7.21	5.77	8.65	Siemens Immulite 2000/2500	
	mU/ml	7.91	6.33	9.49	Siemens Immulite 1000	
	mU/ml	7.60	6.08	9.12	Beckman DxI800	
	mU/ml	6.95	5.56	8.34	Roche/BM Elecsys	
	mU/ml	8.76	7.01	10.5	Diasorin Liaison	
	mU/ml	7.52	6.02	9.02	Beckman Access	
	mU/ml	8.74	6.99	10.5	Tosoh Series	
	mU/ml	5.54	4.43	6.65	Vitros ECi	
	mU/ml	7.32	5.86	8.78	Roche Cobas 4000/E411	
	mU/ml	6.62	5.30	7.94	Roche Cobas e601/602	
	mU/ml	6.91	5.53	8.29	Siemens Centaur CP	
	mU/ml	8.11	6.49	9.73	Mindray CL-2000i	
	mU/ml	9.63	7.70	11.6	Diasorin Liaison XL	
	mU/ml	7.03	5.62	8.44	Siemens Atellica IM	
	mU/ml	6.94	5.55	8.33	Abbott Alinity i	
mU/ml	6.90	5.52	8.28	Roche Cobas e402/e801		
Gentamicin	µmol/l	4.88	3.90	5.86	Roche Integra	
	µg/ml	2.33	1.86	2.80		
	µmol/l	4.93	3.94	5.92	Siemens Centaur XP/XPT/Classic	
	µg/ml	2.36	1.88	2.84		
	µmol/l	4.84	3.87	5.81	Abbott Architect (CMIA)	
	µg/ml	2.31	1.85	2.77		
	µmol/l	3.77	3.02	4.52	Roche Cobas 6000/8000 Online KIMS	
	µg/ml	1.80	1.44	2.16		
µmol/l	4.20	3.36	5.04	Roche Cobas 6000/8000 CEDIA		
µg/ml	2.01	1.61	2.41			

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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Analyte	unit	Target	Range		methods
			low	high	
Gentamicin	µmol/l	5.74	4.59	6.89	EMIT
	µg/ml	2.74	2.19	3.29	
	µmol/l	5.01	4.01	6.01	Siemens Atellica CH
	µg/ml	2.39	1.92	2.86	
	µmol/l	5.08	4.06	6.10	Abbott Alinity (PETINA)
	µg/ml	2.43	1.94	2.92	
Growth Hormone (GH)	µmol/l	4.85	3.88	5.82	Gravimetric
	µg/ml	2.32	1.85	2.78	
	µU/ml	4.52	3.62	5.42	Siemens Immulite 2000/2500
	ng/ml	1.51	1.21	1.81	
	µU/ml	4.44	3.55	5.33	Siemens Immulite 1000
	ng/ml	1.48	1.18	1.78	
	µU/ml	3.07	2.46	3.68	Beckman DxI800
	ng/ml	1.02	0.819	1.22	
	µU/ml	3.37	2.70	4.04	Beckman Access
	ng/ml	1.12	0.899	1.34	
	µU/ml	4.13	3.30	4.96	Tosoh Series
	ng/ml	1.38	1.10	1.66	
	µU/ml	3.33	2.66	4.00	Diasorin Liaison
	ng/ml	1.11	0.886	1.33	
	µU/ml	3.98	3.18	4.78	Roche Cobas 4000/E411
	ng/ml	1.33	1.06	1.60	
	µU/ml	4.20	3.36	5.04	Roche Cobas e601/602
	ng/ml	1.40	1.12	1.68	
Immunoglobulin E	µU/ml	3.06	2.45	3.67	Diasorin Liaison XL
	ng/ml	1.02	0.816	1.22	
	µU/ml	4.04	3.23	4.85	Roche Cobas e402/e801
	ng/ml	1.35	1.08	1.62	
	µU/ml	3.37	2.70	4.04	Tosoh AIA-CL Series
	ng/ml	1.12	0.899	1.34	
	KIU/l = IU/ml	217	174	260	Abbott Architect
	KIU/l = IU/ml	205	164	246	BioMerieux Vidas
	KIU/l = IU/ml	236	189	283	Siemens Centaur XP/XPT/Classic
	KIU/l = IU/ml	241	193	289	Siemens Immulite 2000/2500
	KIU/l = IU/ml	250	200	300	Siemens Immulite 1000
	KIU/l = IU/ml	227	182	272	Roche Elecsys
	KIU/l = IU/ml	214	171	257	Pharmacia Unicap
	KIU/l = IU/ml	206	165	247	Tosoh Series
KIU/l = IU/ml	234	187	281	Roche Cobas 4000/E411	
KIU/l = IU/ml	230	184	276	Roche Cobas e601/602	
KIU/l = IU/ml	201	161	241	Siemens Centaur CP	
KIU/l = IU/ml	227	182	272	Siemens Atellica IM	
KIU/l = IU/ml	239	191	287	Roche Cobas e402/e801	
KIU/l = IU/ml	217	174	260	Abbott Alinity	
Insulin	mU/l	1.11	0.833	1.39	Siemens Centaur XP/XPT/Classic
	µU/ml	1.11	0.833	1.39	

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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Analyte	unit	Target	Range		methods
			low	high	
Insulin	mU/l	1.47	1.10	1.84	Roche Elecsys
	µU/ml	1.47	1.10	1.84	
	mU/l	0.723	0.542	0.904	Beckman Access
	µU/ml	0.723	0.542	0.904	
	mU/l	1.01	0.758	1.26	Abbott Architect
	µU/ml	1.01	0.758	1.26	
	mU/l	1.91	1.43	2.39	Tosoh Series
	µU/ml	1.91	1.43	2.39	
	mU/l	1.32	0.990	1.65	Roche Cobas 4000/E411
	µU/ml	1.32	0.990	1.65	
	mU/l	0.726	0.545	0.908	Beckman Dxl 600/800
	µU/ml	0.726	0.545	0.907	
	mU/l	1.10	0.825	1.38	Diasorin Liaison
	µU/ml	1.10	0.825	1.38	
	mU/l	1.47	1.10	1.84	Roche Cobas 6000/8000
	µU/ml	1.47	1.10	1.84	
	mU/l	1.74	1.31	2.18	Mindray CL Series
	µU/ml	1.74	1.31	2.17	
	mU/l	1.27	0.953	1.59	Siemens Atellica IM
	µU/ml	1.27	0.953	1.59	
mU/l	2.14	1.61	2.68	Tosoh AIA-CL Series	
µU/ml	2.14	1.61	2.67		
Luteinising Hormone (LH)	mU/ml	2.13	1.70	2.56	Abbott Architect
	mU/ml	2.53	2.02	3.04	BioMerieux Vidas
	mU/ml	2.55	2.04	3.06	Siemens Centaur XP/XPT/Classic
	mU/ml	4.75	3.80	5.70	Siemens Immulite 2000
	mU/ml	5.46	4.37	6.55	Siemens Immulite 1000
	mU/ml	2.01	1.61	2.41	Beckman Dxl800
	mU/ml	3.48	2.78	4.18	Roche Elecsys
	mU/ml	3.07	2.46	3.68	Diasorin Liaison
	mU/ml	2.09	1.67	2.51	Beckman Access
	mU/ml	2.38	1.90	2.86	Tosoh Series
	mU/ml	4.82	3.86	5.78	Vitros Eci
	mU/ml	3.52	2.82	4.22	Roche Cobas 4000/E411
	mU/ml	3.51	2.81	4.21	Roche Cobas e601/602
	mU/ml	2.49	1.99	2.99	Siemens Centaur CP
	mU/ml	3.41	2.73	4.09	Mindray CL-2000i
	mU/ml	3.45	2.76	4.14	Diasorin Liaison XL
	mU/ml	2.50	2.00	3.00	Siemens Atellica IM
	mU/ml	2.05	1.64	2.46	Abbott Alinity i
	mU/ml	3.58	2.86	4.30	Roche Cobas e402/e801
	Oestradiol	pmol/l	190	152	228
pg/ml		51.7	41.3	62.1	
pmol/l		229	183	275	BioMerieux Vidas
pg/ml		62.3	49.8	74.8	
pmol/l		147	118	176	Siemens Centaur XP/XPT/Classic
pg/ml	40.0	32.1	47.9		

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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Analyte	unit	Target	Range		methods
			low	high	
Oestradiol	pmol/l	117	93.6	140	Beckman DxI800
	pg/ml	31.8	25.5	38.1	
	pmol/l	167	134	200	Roche Elecsys (Estradiol II)
	pg/ml	45.4	36.4	54.4	
	pmol/l	119	95.2	143	Beckman Access
	pg/ml	32.4	25.9	38.9	
	pmol/l	96.6	77.3	116	Vitros ECI
	pg/ml	26.3	21.0	31.6	
	pmol/l	161	129	193	Roche Cobas e601/602 (Estradiol II)
	pg/ml	43.8	35.1	52.5	
	pmol/l	163	130	196	Roche Cobas 4000/E411 (Estradiol II)
	pg/ml	44.3	35.4	53.2	
	pmol/l	155	124	186	Siemens Centaur XP/XPT/Classic Enhanced (eE2)
	pg/ml	42.2	33.7	50.7	
	pmol/l	150	120	180	Siemens Centaur CP
	pg/ml	40.8	32.6	49.0	
	pmol/l	169	135	203	Roche Cobas e601/602 (Estradiol III)
	pg/ml	46.0	36.7	55.3	
	pmol/l	146	117	175	Roche Elecsys (Estradiol III)
	pg/ml	39.7	31.8	47.6	
pmol/l	163	130	196	Roche Cobas 4000/E411 (Estradiol III)	
pg/ml	44.3	35.4	53.2		
pmol/l	114	91.2	137	Mindray CL Series	
pg/ml	31.0	24.8	37.2		
pmol/l	92.2	73.8	111	Diasorin Liaison XL	
pg/ml	25.1	20.1	30.1		
pmol/l	135	108	162	Beckman Access / Access 2 Sensitive B84493	
pg/ml	36.7	29.4	44.0		
pmol/l	116	92.8	139	Beckman DxI600/800 Sensitive B84493	
pg/ml	31.6	25.2	38.0		
pmol/l	151	121	181	Siemens Atellica IM	
pg/ml	41.1	32.9	49.3		
pmol/l	187	150	224	Abbott Alinity i	
pg/ml	50.9	40.8	61.0		
pmol/l	163	130	196	Roche Cobas e801 (Estradiol III)	
pg/ml	44.3	35.4	53.2		
Paracetamol	mmol/l	0.157	0.126	0.188	Abbott Architect
	mg/l	23.8	19.1	28.5	
	mmol/l	0.152	0.122	0.182	Roche Cobas c501/502/503/701/702
	mg/l	23.0	18.5	27.5	
	mmol/l	0.161	0.129	0.193	Beckman AU Instruments
	mg/l	24.4	19.5	29.3	
	mmol/l	0.155	0.124	0.186	EMIT
	mg/l	23.5	18.8	28.2	
	mmol/l	0.160	0.128	0.192	Abbott Alinity
	mg/l	24.2	19.4	29.0	



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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Analyte	unit	Target	Range		methods
			low	high	
Paracetamol	mmol/l	0.166	0.130	0.200	Gravimetric
	mg/l	25.1	19.7	30.3	
Phenobarbital	µmol/l	35.9	28.7	43.1	Abbott Architect (CMIA)
	µg/ml	8.33	6.66	10.0	
	µmol/l	32.5	26.0	39.0	Roche Cobas e601/602/801
	µg/ml	7.54	6.03	9.05	
	µmol/l	36.6	29.3	43.9	Siemens Immulite 2000/2500
	µg/ml	8.49	6.80	10.2	
	µmol/l	30.3	24.2	36.4	Beckman AU400/600/640/2700/5400
	µg/ml	7.03	5.61	8.45	
	µmol/l	46.5	37.2	55.8	Siemens Centaur XP/XPT/Classic
	µg/ml	10.8	8.63	13.0	
	µmol/l	34.5	27.6	41.4	Roche Integra
	µg/ml	8.00	6.40	9.60	
	µmol/l	32.0	25.6	38.4	Roche Cobas C303/501/502/503/701
	µg/ml	7.42	5.94	8.90	
	µmol/l	33.8	27.0	40.6	Abbott Architect (PETINA)
	µg/ml	7.84	6.26	9.42	
	µmol/l	35.0	28.0	42.0	Siemens Atellica CH
	µg/ml	8.12	6.50	9.74	
µmol/l	29.8	23.8	35.8	Abbott Alinity (PETINA)	
µg/ml	6.91	5.52	8.30		
µmol/l	34.5	27.6	41.4	Gravimetric	
µg/ml	8.00	6.40	9.60		
Phenytoin	µmol/l	19.5	15.6	23.4	Abbott Architect
	µg/ml	4.92	3.94	5.90	
	µmol/l	19.5	15.6	23.4	Siemens Centaur XP/XPT/Classic
	µg/ml	4.92	3.94	5.90	
	µmol/l	17.5	14.0	21.0	Siemens Dimension
	µg/ml	4.42	3.54	5.30	
	µmol/l	19.2	15.4	23.0	Siemens Immulite 2000/2500
	µg/ml	4.85	3.89	5.81	
	µmol/l	18.5	14.8	22.2	Roche Cobas 6000/8000
	µg/ml	4.67	3.74	5.60	
	µmol/l	19.6	15.7	23.5	Beckman DxC
	µg/ml	4.95	3.96	5.94	
	µmol/l	18.3	14.6	22.0	Beckman AU Instruments
	µg/ml	4.62	3.69	5.55	
	µmol/l	19.3	15.4	23.2	EMIT
	µg/ml	4.87	3.89	5.85	
	µmol/l	16.8	13.4	20.2	Siemens Atellica CH
	µg/ml	4.24	3.38	5.10	
µmol/l	19.9	15.9	23.9	Abbott Alinity	
µg/ml	5.02	4.01	6.03		
µmol/l	20.2	16.2	24.2	Gravimetric	
µg/ml	5.10	4.09	6.11		

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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Analyte	unit	Target	Range		methods
			low	high	
Primidone	µmol/l	12.3	9.84	14.8	Gravimetric
	µg/ml	2.69	2.15	3.23	
Progesterone	nmol/l	3.14	2.51	3.77	Abbott Architect
	ng/ml	0.983	0.786	1.18	
	nmol/l	4.37	3.50	5.24	BioMerieux Vidas
	ng/ml	1.37	1.10	1.64	
	nmol/l	2.45	1.96	2.94	Siemens Centaur XP/XPT/Classic
	ng/ml	0.767	0.613	0.921	
	nmol/l	3.19	2.55	3.83	Siemens Immulite 2000/2500
	ng/ml	0.998	0.798	1.20	
	nmol/l	3.07	2.46	3.68	Siemens Immulite 1000
	ng/ml	0.961	0.770	1.15	
	nmol/l	2.85	2.28	3.42	Beckman Dxl Prog Cal 33555
	ng/ml	0.892	0.714	1.07	
	nmol/l	3.29	2.63	3.95	Roche Elecsys (Prog. II)
	ng/ml	1.03	0.823	1.24	
	nmol/l	2.91	2.33	3.49	Beckman Access Prog Cal 33555
	ng/ml	0.911	0.729	1.09	
	nmol/l	3.09	2.47	3.71	Vitros Eci
	ng/ml	0.967	0.773	1.16	
	nmol/l	3.32	2.66	3.98	Roche Cobas 4000/e411 (Prog. II)
	ng/ml	1.04	0.833	1.25	
	nmol/l	3.48	2.78	4.18	Roche Cobas e601/602 (Prog. II)
	ng/ml	1.09	0.870	1.31	
	nmol/l	2.42	1.94	2.90	Siemens Centaur CP
	ng/ml	0.757	0.607	0.907	
	nmol/l	2.65	2.12	3.18	Mindray CL-2000i
	ng/ml	0.829	0.664	0.994	
	nmol/l	3.47	2.78	4.16	Roche Cobas e601/602 (Prog. III)
	ng/ml	1.09	0.870	1.31	
nmol/l	3.57	2.86	4.28	Roche Elecsys (Prog. III)	
ng/ml	1.12	0.895	1.35		
nmol/l	3.42	2.74	4.10	Roche Cobas 4000/e411 (Prog. III)	
ng/ml	1.07	0.858	1.28		
nmol/l	1.91	1.53	2.29	Diasorin Liaison XL	
ng/ml	0.598	0.479	0.717		
nmol/l	2.88	2.30	3.46	Abbott Alinity i	
ng/ml	0.901	0.720	1.08		
nmol/l	3.26	2.61	3.91	Roche Cobas e801 (Prog. III)	
ng/ml	1.02	0.817	1.22		
nmol/l	3.98	3.18	4.78	Tosoh AIA-CL Series	
ng/ml	1.25	0.995	1.51		
Prolactin	µU/ml	168	134	202	Abbott Architect
	µU/ml	143	114	172	BioMerieux Vidas
	µU/ml	146	117	175	Siemens Centaur XP/XPT/Classic

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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Analyte	unit	Target	Range		methods
			low	high	
Prolactin	µU/ml	150	120	180	Siemens Immulite 2000/2500
	µU/ml	165	132	198	Siemens Immulite 1000
	µU/ml	139	111	167	Beckman Dxl800
	µU/ml	128	102	154	Roche Elecsys
	µU/ml	129	103	155	Diasorin Liaison
	µU/ml	143	114	172	Beckman Access
	µU/ml	161	129	193	Tosoh Series
	µU/ml	173	138	208	Vitros ECi
	µU/ml	125	100	150	Roche Elecsys/E170/Cobas 6000/8000 PRLII
	µU/ml	156	125	187	Immunotech IRMA
	µU/ml	130	104	156	Roche Cobas 4000/E411
	µU/ml	125	100	150	Roche Cobas e601/602
	µU/ml	141	113	169	Siemens Centaur CP
	µU/ml	200	160	240	Mindray CL-2000i
	µU/ml	160	128	192	Diasorin Liaison XL
	µU/ml	145	116	174	Siemens Atellica IM
	µU/ml	170	136	204	Abbott Alinity i
µU/ml	125	100	150	Roche Cobas e801 PRL II	
PSA Free	ng/ml = µg/l	1.85	1.39	2.31	Abbott Architect
	ng/ml = µg/l	2.07	1.55	2.59	BioMerieux Vidas
	ng/ml = µg/l	1.60	1.20	2.00	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	1.68	1.26	2.10	Siemens Immulite 2000/2500
	ng/ml = µg/l	1.79	1.34	2.24	Beckman DXI standardised to Hybritech
	ng/ml = µg/l	1.24	0.930	1.55	Roche Elecsys
	ng/ml = µg/l	1.55	1.16	1.94	Diasorin Liaison
	ng/ml = µg/l	1.84	1.38	2.30	Beckman Access standardised to Hybritech
	ng/ml = µg/l	1.26	0.945	1.58	Tosoh Series
	ng/ml = µg/l	1.20	0.900	1.50	Roche Cobas 4000/E411
	ng/ml = µg/l	1.22	0.915	1.53	Roche Cobas e601/602
	ng/ml = µg/l	1.69	1.27	2.11	Beckman Dxl800 standardised to WHO IRP96/670
	ng/ml = µg/l	1.72	1.29	2.15	Beckman Access standardised to WHO IRP96/670
	ng/ml = µg/l	1.06	0.795	1.33	Ortho Vitros 3600/5600/ECi PSA II
	ng/ml = µg/l	1.63	1.22	2.04	Diasorin Liaison XL
	ng/ml = µg/l	1.65	1.24	2.06	Siemens Atellica IM
	ng/ml = µg/l	1.87	1.40	2.34	Abbott Alinity i
ng/ml = µg/l	1.19	0.893	1.49	Roche Cobas e402/e801	
PSA Total	ng/ml = µg/l	1.21	0.908	1.51	Abbott Architect
	ng/ml = µg/l	1.99	1.49	2.49	BioMerieux Vidas
	ng/ml = µg/l	1.97	1.48	2.46	bioMerieux VIDAS TPSA
	ng/ml = µg/l	1.54	1.16	1.93	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	1.77	1.33	2.21	Siemens Immulite 2000/2500 1st generation
	ng/ml = µg/l	1.78	1.34	2.23	Siemens Immulite 2000/2500 3rd generation
	ng/ml = µg/l	2.09	1.57	2.61	Siemens Immulite 1000 1st generation
	ng/ml = µg/l	1.56	1.17	1.95	Beckman Dxl standardisd to Hybritech
	ng/ml = µg/l	1.34	1.01	1.68	Beckman Dxl800 standardised to WHO IRP96/670
	ng/ml = µg/l	1.54	1.16	1.93	Roche Elecsys

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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Analyte	unit	Target	Range		methods
			low	high	
PSA Total	ng/ml = µg/l	1.46	1.10	1.83	Diasorin Liaison
	ng/ml = µg/l	1.62	1.22	2.03	Beckman Access standardised to Hybritech
	ng/ml = µg/l	1.62	1.22	2.03	Beckman Access standardised to WHO IRP96/670
	ng/ml = µg/l	1.33	0.998	1.66	Tosoh Series
	ng/ml = µg/l	1.54	1.16	1.93	Vitros ECi
	ng/ml = µg/l	2.22	1.67	2.78	CIS RIA Coated tube
	ng/ml = µg/l	1.56	1.17	1.95	Roche Cobas 4000/E411
	ng/ml = µg/l	1.60	1.20	2.00	Roche Cobas e601/602
	ng/ml = µg/l	1.53	1.15	1.91	Ortho Vitros 3600/5600/ECi PSA II
	ng/ml = µg/l	1.39	1.04	1.74	Siemens Centaur CP
	ng/ml = µg/l	1.51	1.13	1.89	Diasorin Liaison XL
	ng/ml = µg/l	1.53	1.15	1.91	Siemens Atellica IM
	ng/ml = µg/l	1.25	0.938	1.56	Abbott Alinity i
	ng/ml = µg/l	1.55	1.16	1.94	Roche Cobas e402/e801
Salicylic Acid	mmol/l	0.267	0.214	0.320	Roche Cobas c501/502/503
	mg/dl	3.69	2.96	4.42	
	mmol/l	0.286	0.230	0.340	Gravimetric
	mg/dl	3.95	3.18	4.70	
SHBG	nmol/l	12.2	9.76	14.6	Siemens Immulite 2000/2500
	nmol/l	12.3	9.84	14.8	Abbott Architect
	nmol/l	11.8	9.44	14.2	Beckman Access
	nmol/l	12.0	9.60	14.4	Beckman Dxl800
	nmol/l	10.4	8.32	12.5	Siemens Atellica IM
	nmol/l	11.6	9.28	13.9	Roche analysers - 413417/15
	nmol/l	11.3	9.04	13.6	Roche Cobas e801 - 413429
	nmol/l	12.4	9.92	14.9	Abbott Alinity i
T Uptake	%U	34.1	28.0	40.2	Siemens Immulite 2000
Testosterone	nmol/l	1.98	1.58	2.38	Abbott Architect
	ng/ml	0.570	0.455	0.685	
	ng/dl	57.0	45.5	68.5	
	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	1.22	0.976	1.46	Siemens Centaur XP/XPT/Classic
	ng/ml	0.351	0.281	0.421	
	ng/dl	35.1	28.1	42.1	
	nmol/l	1.59	1.27	1.91	CIS RIA Coated tube
	ng/ml	0.458	0.366	0.550	
	ng/dl	45.8	36.6	55.0	
	nmol/l	1.41	1.13	1.69	Siemens Immulite 1000
	ng/ml	0.406	0.325	0.487	
	ng/dl	40.6	32.5	48.7	
	nmol/l	1.68	1.34	2.02	Beckman Dxl800
	ng/ml	0.484	0.386	0.582	
	ng/dl	48.4	38.6	58.2	
nmol/l	1.84	1.47	2.21	Beckman Access	
ng/ml	0.530	0.423	0.637		
ng/dl	53.0	42.3	63.7		

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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Analyte	unit	Target	Range		methods
			low	high	
Testosterone	nmol/l	0.983	0.786	1.18	Tosoh Series
	ng/ml	0.283	0.226	0.340	
	ng/dl	28.3	22.6	34.0	
	nmol/l	1.03	0.824	1.24	Vitros ECI
	ng/ml	0.297	0.237	0.357	
	ng/dl	29.7	23.7	35.7	
	nmol/l	1.78	1.42	2.14	Roche Cobas e601/602 Test II
	ng/ml	0.513	0.409	0.617	
	ng/dl	51.3	40.9	61.7	
	nmol/l	1.86	1.49	2.23	Roche Elecsys Test II
	ng/ml	0.536	0.429	0.643	
	ng/dl	53.6	42.9	64.3	
	nmol/l	1.80	1.44	2.16	Roche Cobas 4000/e411 Test II
	ng/ml	0.518	0.415	0.621	
	ng/dl	51.8	41.5	62.1	
	nmol/l	2.00	1.60	2.40	Abbott Architect 2nd Generation
	ng/ml	0.576	0.461	0.691	
	ng/dl	57.6	46.1	69.1	
	nmol/l	1.19	0.952	1.43	Siemens Centaur CP
	ng/ml	0.343	0.274	0.412	
	ng/dl	34.3	27.4	41.2	
	nmol/l	1.03	0.824	1.24	BioMerieux Vidas Testosterone II
	ng/ml	0.297	0.237	0.357	
	ng/dl	29.7	23.7	35.7	
nmol/l	1.22	0.976	1.46	Siemens Centaur TST II	
ng/ml	0.351	0.281	0.421		
ng/dl	35.1	28.1	42.1		
nmol/l	0.764	0.611	0.917	Diasorin Liaison XL	
ng/ml	0.220	0.176	0.264		
ng/dl	22.0	17.6	26.4		
nmol/l	1.15	0.920	1.38	Siemens Atellica IM	
ng/ml	0.331	0.265	0.397		
ng/dl	33.1	26.5	39.7		
nmol/l	1.78	1.42	2.14	Roche Cobas e801 Test II	
ng/ml	0.513	0.409	0.617		
ng/dl	51.3	40.9	61.7		
nmol/l	1.92	1.54	2.30	Tosoh AIA-CL Series	
ng/ml	0.553	0.444	0.662		
ng/dl	55.3	44.4	66.2		
nmol/l	1.93	1.54	2.32	Abbott Alinity i	
ng/ml	0.556	0.444	0.668		
ng/dl	55.6	44.4	66.8		
Theophylline	µmol/l	32.3	25.8	38.8	Siemens Centaur XP/XPT/Classic
	µg/ml	5.82	4.65	6.99	

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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Analyte	unit	Target	Range		methods	
			low	high		
Theophylline	µmol/l	28.6	22.9	34.3	Roche Integra	
	µg/ml	5.15	4.13	6.17		
	µmol/l	24.6	19.7	29.5	Abbott Architect (CMIA)	
	µg/ml	4.43	3.55	5.31		
	µmol/l	26.8	21.4	32.2	Roche Cobas 6000/8000	
	µg/ml	4.83	3.86	5.80		
	µmol/l	25.4	20.3	30.5	Beckman AU400/600/640/2700/5400	
	µg/ml	4.58	3.66	5.50		
	µmol/l	28.3	22.6	34.0	Gravimetric	
	µg/ml	5.10	4.07	6.13		
	Thyroglobulin	ng/ml	2.08	1.56	2.60	Roche Elecsys
		ng/ml	1.71	1.28	2.14	Beckman Dxl800
ng/ml		2.16	1.62	2.70	Roche Cobas 4000/E411	
ng/ml		2.10	1.58	2.63	Roche Cobas e601/602	
ng/ml		1.84	1.38	2.30	Beckman Access	
ng/ml		2.17	1.63	2.71	Abbott Architect 2000i	
ng/ml		2.45	1.84	3.06	Tosoh Series	
ng/ml		2.15	1.61	2.69	Roche Cobas e601/602 Tg II	
ng/ml		2.22	1.67	2.78	Roche Elecsys TGII	
ng/ml		2.15	1.61	2.69	Roche Cobas 4000/E411 TGII	
ng/ml		0.717	0.538	0.896	Diasorin Liaison XL	
ng/ml		2.09	1.57	2.61	Roche Cobas e801 Tg II	
ng/ml		0.645	0.484	0.806	DiaSorin Liaison TG II Gen	
ng/ml		0.756	0.567	0.945	DiaSorin Liaison XL TG II Gen	
ng/ml		2.09	1.57	2.61	Abbott Alinity i	
Thyroid Stimulating Hormone	µU/ml = mIU/l	0.065	0.052	0.078	Abbott Architect	
	µU/ml = mIU/l	0.050	0.040	0.060	bioMerieux VIDAS TSH	
	µU/ml = mIU/l	0.041	0.033	0.049	bioMerieux VIDAS TSH3 Ultrasensitive	
	µU/ml = mIU/l	0.073	0.058	0.088	Siemens Centaur XP/XPT/Classic	
	µU/ml = mIU/l	0.071	0.057	0.085	Siemens Centaur XP/XPT/Classic 3rd Generation	
	µU/ml = mIU/l	0.061	0.049	0.073	Beckman Dxl800 Fast TSH	
	µU/ml = mIU/l	0.060	0.048	0.072	Beckman Dxl800	
	µU/ml = mIU/l	0.112	0.090	0.134	Roche Elecsys	
	µU/ml = mIU/l	0.112	0.090	0.134	Diasorin Liaison	
	µU/ml = mIU/l	0.065	0.052	0.078	Beckman Access Fast TSH	
	µU/ml = mIU/l	0.062	0.050	0.074	Beckman Access hyperTSH 3rd Generation	
	µU/ml = mIU/l	0.092	0.074	0.110	Tosoh Series	
	µU/ml = mIU/l	0.055	0.044	0.066	Vitros ECi	
	µU/ml = mIU/l	0.104	0.083	0.125	Roche Cobas 4000/E411	
	µU/ml = mIU/l	0.104	0.083	0.125	Roche Cobas e601/602	
	µU/ml = mIU/l	0.060	0.048	0.072	Beckman Dxl800 Hyper TSH	
	µU/ml = mIU/l	0.069	0.055	0.083	Siemens Centaur XP/XPT/Classic TSH3-Ultra	
	µU/ml = mIU/l	0.068	0.054	0.082	Siemens Centaur CP	
	µU/ml = mIU/l	0.064	0.051	0.077	Siemens Centaur CP TSH3-Ultra	
	µU/ml = mIU/l	0.106	0.085	0.127	Mindray CL-2000i	
µU/ml = mIU/l	0.062	0.050	0.074	Beckman Dxl 600/800 Access (3rd IS)		

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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Analyte	unit	Target	Range		methods
			low	high	
Thyroid Stimulating Hormone	µU/ml = mIU/l	0.115	0.092	0.138	Diasorin Liaison XL
	µU/ml = mIU/l	0.072	0.058	0.086	Siemens Atellica IM
	µU/ml = mIU/l	0.067	0.054	0.080	Abbott Alinity i
	µU/ml = mIU/l	0.093	0.074	0.112	Roche Cobas e402/e801
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	11.2	8.96	13.4	Abbott Architect
	IU/ml	0.011	0.009	0.013	
	mU/ml=IU/l	6.06	4.85	7.27	BioMerieux Vidas
	IU/ml	0.006	0.005	0.007	
	mU/ml=IU/l	11.0	8.80	13.2	Siemens Centaur XP/XPT/Classic
	IU/ml	0.011	0.009	0.013	
	mU/ml=IU/l	9.08	7.26	10.9	Siemens Dimension
	IU/ml	0.009	0.007	0.011	
	mU/ml=IU/l	20.4	16.3	24.5	Siemens Immulite 2000
	IU/ml	0.020	0.016	0.024	
	mU/ml=IU/l	18.3	14.6	22.0	Siemens Immulite 1000
	IU/ml	0.018	0.015	0.021	
	mU/ml=IU/l	16.0	12.8	19.2	Beckman Dxl800
	IU/ml	0.016	0.013	0.019	
	mU/ml=IU/l	9.73	7.78	11.7	Diasorin Liaison
	IU/ml	0.010	0.008	0.012	
	mU/ml=IU/l	11.0	8.80	13.2	Roche Cobas Core EIA
	IU/ml	0.011	0.009	0.013	
	mU/ml=IU/l	15.7	12.6	18.8	Beckman Access
	IU/ml	0.016	0.013	0.019	
	mU/ml=IU/l	12.3	9.84	14.8	Tosoh Series
	IU/ml	0.012	0.010	0.014	
	mU/ml=IU/l	9.74	7.79	11.7	Vitros ECi
	IU/ml	0.010	0.008	0.012	
	mU/ml=IU/l	4.86	3.89	5.83	Roche hCG STAT (Intact)
	IU/ml	0.005	0.004	0.006	
	mU/ml=IU/l	11.1	8.88	13.3	Roche hCG+Beta
	IU/ml	0.011	0.009	0.013	
	mU/ml=IU/l	15.5	12.4	18.6	Beckman Access Total BhCG (5th IS)
	IU/ml	0.016	0.012	0.020	
	mU/ml=IU/l	16.2	13.0	19.4	Beckman Dxl Total BhCG (5th IS)
	IU/ml	0.016	0.013	0.019	
mU/ml=IU/l	9.57	7.66	11.5	Siemens Centaur CP	
IU/ml	0.010	0.008	0.012		
mU/ml=IU/l	10.8	8.64	13.0	Diasorin Liaison XL	
IU/ml	0.011	0.009	0.013		
mU/ml=IU/l	9.83	7.86	11.8	Siemens Atellica IM	
IU/ml	0.010	0.008	0.012		
mU/ml=IU/l	11.4	9.12	13.7	Abbott Alinity i	
IU/ml	0.011	0.009	0.013		

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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Analyte	unit	Target	Range		methods
			low	high	
Total Beta hCG	mU/ml=IU/l	11.2	8.96	13.4	Roche hCG+Beta e801
	IU/ml	0.011	0.009	0.013	
	mU/ml=IU/l	15.3	12.2	18.4	Tosoh AIA-CL Series
	IU/ml	0.015	0.012	0.018	
Total T3	nmol/l	0.795	0.596	0.994	Abbott Architect
	ng/ml	0.518	0.388	0.648	
	ng/dl	51.8	38.8	64.8	
	nmol/l	0.634	0.476	0.793	BioMerieux Vidas
	ng/ml	0.413	0.310	0.516	
	ng/dl	41.3	31.0	51.6	
	nmol/l	0.734	0.551	0.918	Siemens Centaur XP/XPT/Classic
	ng/ml	0.478	0.359	0.597	
	ng/dl	47.8	35.9	59.7	
	nmol/l	0.620	0.465	0.775	Siemens Immulite 2000/2500
	ng/ml	0.404	0.303	0.505	
	ng/dl	40.4	30.3	50.5	
	nmol/l	0.635	0.476	0.794	Siemens Immulite 1000
	ng/ml	0.413	0.310	0.516	
	ng/dl	41.3	31.0	51.6	
	nmol/l	1.08	0.810	1.35	Beckman Dxl800
	ng/ml	0.703	0.527	0.879	
	ng/dl	70.3	52.7	87.9	
	nmol/l	1.44	1.08	1.80	Roche Elecsys
	ng/ml	0.937	0.703	1.17	
	ng/dl	93.7	70.3	117	
	nmol/l	1.11	0.833	1.39	Beckman Access
	ng/ml	0.723	0.542	0.904	
	ng/dl	72.3	54.2	90.4	
	nmol/l	0.746	0.560	0.933	Tosoh Series
	ng/ml	0.486	0.365	0.607	
	ng/dl	48.6	36.5	60.7	
	nmol/l	0.979	0.734	1.22	Vitros ECi
ng/ml	0.637	0.478	0.796		
ng/dl	63.7	47.8	79.6		
nmol/l	0.538	0.404	0.673	CIS RIA Coated tube	
ng/ml	0.350	0.263	0.437		
ng/dl	35.0	26.3	43.7		
nmol/l	1.37	1.03	1.71	Roche Cobas 4000/E411	
ng/ml	0.892	0.671	1.11		
ng/dl	89.2	67.1	111		
nmol/l	0.739	0.554	0.924	Immunotech RIA	
ng/ml	0.481	0.361	0.601		
ng/dl	48.1	36.1	60.1		
nmol/l	1.34	1.01	1.68	Roche Cobas e601/602	
ng/ml	0.872	0.658	1.09		
ng/dl	87.2	65.8	109		



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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Analyte	unit	Target	Range		methods
			low	high	
Total T3	nmol/l	0.782	0.587	0.978	Mindray CL Series
	ng/ml	0.509	0.382	0.636	
	ng/dl	50.9	38.2	63.6	
	nmol/l	0.986	0.740	1.23	Diasorin Liaison XL
	ng/ml	0.642	0.482	0.802	
	ng/dl	64.2	48.2	80.2	
	nmol/l	0.804	0.603	1.01	Abbott Alinity i
	ng/ml	0.523	0.393	0.653	
	ng/dl	52.3	39.3	65.3	
	nmol/l	0.799	0.599	0.999	Siemens Atellica IM
	ng/ml	0.520	0.390	0.650	
	ng/dl	52.0	39.0	65.0	
nmol/l	1.28	0.960	1.60	Roche Cobas e402/e801	
ng/ml	0.833	0.625	1.04		
ng/dl	83.3	62.5	104		
nmol/l	0.728	0.546	0.910	Tosoh AIA-CL Series	
ng/ml	0.474	0.355	0.593		
ng/dl	47.4	35.5	59.3		
Total T4	nmol/l	34.9	26.2	43.6	Abbott Architect
	µg/dl	2.72	2.04	3.40	
	ng/ml	27.2	20.4	34.0	
	nmol/l	34.8	26.1	43.5	BioMerieux Vidas
	µg/dl	2.71	2.04	3.38	
	ng/ml	27.1	20.4	33.8	
	nmol/l	24.9	18.7	31.1	Siemens Centaur XP/XPT/Classic
	µg/dl	1.94	1.46	2.42	
	ng/ml	19.4	14.6	24.2	
	nmol/l	24.6	18.5	30.8	Siemens Immulite 2000/2500
	µg/dl	1.92	1.44	2.40	
	ng/ml	19.2	14.4	24.0	
	nmol/l	28.0	21.0	35.0	Siemens Immulite 1000
	µg/dl	2.18	1.64	2.72	
	ng/ml	21.8	16.4	27.2	
	nmol/l	26.0	19.5	32.5	Beckman Dxl800
	µg/dl	2.03	1.52	2.54	
	ng/ml	20.3	15.2	25.4	
	nmol/l	38.7	29.0	48.4	Roche Elecsys
	µg/dl	3.02	2.26	3.78	
	ng/ml	30.2	22.6	37.8	
nmol/l	29.1	21.8	36.4	Beckman Access	
µg/dl	2.27	1.70	2.84		
ng/ml	22.7	17.0	28.4		
nmol/l	28.0	21.0	35.0	Tosoh Series	
µg/dl	2.18	1.64	2.72		
ng/ml	21.8	16.4	27.2		
nmol/l	26.2	19.7	32.8	Vitros ECi	
µg/dl	2.04	1.54	2.54		
ng/ml	20.4	15.4	25.4		

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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Analyte	unit	Target	Range		methods
			low	high	
Total T4	nmol/l	30.4	22.8	38.0	CIS RIA Coated tube
	µg/dl	2.37	1.78	2.96	
	ng/ml	23.7	17.8	29.6	
	nmol/l	38.8	29.1	48.5	Roche Cobas 4000/E411
	µg/dl	3.03	2.27	3.79	
	ng/ml	30.3	22.7	37.9	
	nmol/l	36.0	27.0	45.0	Roche Cobas e601/602
	µg/dl	2.81	2.11	3.51	
	ng/ml	28.1	21.1	35.1	
	nmol/l	33.0	24.8	41.3	Immunotech IRMA
	µg/dl	2.57	1.93	3.21	
	ng/ml	25.7	19.3	32.1	
	nmol/l	26.8	20.1	33.5	Siemens Centaur CP
	µg/dl	2.09	1.57	2.61	
	ng/ml	20.9	15.7	26.1	
	nmol/l	28.6	21.5	35.8	Mindray CL Series
	µg/dl	2.23	1.68	2.78	
	ng/ml	22.3	16.8	27.8	
	nmol/l	37.2	27.9	46.5	Diasorin Liaison XL
	µg/dl	2.90	2.18	3.62	
	ng/ml	29.0	21.8	36.2	
nmol/l	32.0	24.0	40.0	Abbott Alinity i	
µg/dl	2.50	1.87	3.13		
ng/ml	25.0	18.7	31.3		
nmol/l	29.7	22.3	37.1	Siemens Atellica IM	
µg/dl	2.32	1.74	2.90		
ng/ml	23.2	17.4	29.0		
nmol/l	35.4	26.6	44.3	Roche Cobas e402/e801	
µg/dl	2.76	2.07	3.45		
ng/ml	27.6	20.7	34.5		
nmol/l	34.9	26.2	43.6	Tosoh AIA-CL Series	
µg/dl	2.72	2.04	3.40		
ng/ml	27.2	20.4	34.0		
Valproic Acid	µmol/l	201	161	241	Abbott Architect (CMIA)
	µg/ml	29.0	23.2	34.8	
	µmol/l	225	180	270	Siemens Centaur XP/XPT/Classic
	µg/ml	32.5	26.0	39.0	
	µmol/l	200	160	240	Siemens Dimension
	µg/ml	28.9	23.1	34.7	
	µmol/l	185	148	222	Siemens Immulite 2000/2500
	µg/ml	26.7	21.4	32.0	
	µmol/l	196	157	235	Roche Integra
	µg/ml	28.3	22.7	33.9	
	µmol/l	190	152	228	Vitros
	µg/ml	27.4	21.9	32.9	

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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Analyte	unit	Target	Range		methods	
			low	high		
Valproic Acid	µmol/l	197	158	236	Roche Cobas 4000/c311	
	µg/ml	28.4	22.8	34.0		
	µmol/l	200	160	240	Roche Cobas 6000/8000	
	µg/ml	28.9	23.1	34.7		
	µmol/l	208	166	250	Beckman AU400/600/640/2700/5400	
	µg/ml	30.0	24.0	36.0		
	µmol/l	174	139	209	Abbott Architect (PETINA)	
	µg/ml	25.1	20.1	30.1		
	µmol/l	218	174	262	EMIT	
	µg/ml	31.5	25.1	37.9		
	µmol/l	209	167	251	Siemens Atellica CH	
	µg/ml	30.2	24.1	36.3		
	µmol/l	181	145	217	Abbott Alinity (CMIA)	
	µg/ml	26.1	20.9	31.3		
Vancomycin	µmol/l	175	140	210	Abbott Alinity (PETINA)	
	µg/ml	25.3	20.2	30.4		
	µmol/l	243	194	292	Gravimetric	
	µg/ml	35.1	28.0	42.1		
	Vancomycin	µmol/l	3.17	2.54	3.80	Roche Integra
		µg/ml	4.71	3.77	5.65	
		µmol/l	3.62	2.90	4.34	Ortho Vitros Microslide Systems
		µg/ml	5.38	4.31	6.45	
		µmol/l	3.63	2.90	4.36	Abbott Architect (CMIA)
		µg/ml	5.39	4.31	6.47	
		µmol/l	2.72	2.18	3.26	Siemens Centaur XP/XPT/Classic
		µg/ml	4.04	3.24	4.84	
		µmol/l	3.49	2.79	4.19	Siemens Dimension
		µg/ml	5.19	4.15	6.23	
		µmol/l	3.40	2.72	4.08	Roche Cobas 6000/8000
		µg/ml	5.05	4.04	6.06	
		µmol/l	3.28	2.62	3.94	Thermo Scientific QMS Vancomycin
		µg/ml	4.87	3.89	5.85	
		µmol/l	3.75	3.00	4.50	Abbott Architect (PETINA)
		µg/ml	5.57	4.46	6.68	
µmol/l		3.48	2.78	4.18	Siemens Atellica CH	
µg/ml		5.17	4.13	6.21		
µmol/l		3.53	2.82	4.24	Abbott Alinity (CMIA)	
µg/ml		5.24	4.19	6.29		
µmol/l	3.64	2.91	4.37	Abbott Alinity (PETINA)		
µg/ml	5.41	4.32	6.50			
Vitamin B12	µmol/l	3.43	2.74	4.12	Gravimetric	
	µg/ml	5.10	4.07	6.12		
	pmol/l	154	123	185	Abbott Architect	
	pg/ml	209	167	251		
Vitamin B12	pmol/l	142	114	170	Siemens Centaur XP/XPT/Classic	
	pg/ml	192	154	230		

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

Cat. No. IA3109 / IA3112 Lot. No. 2105EC Size 12 x 5ml / 4 x 5ml Expiry 2024-12-28

Range					
Analyte	unit	Target	low	high	methods
Vitamin B12	pmol/l	111	88.8	133	Siemens Immulite 2000
	pg/ml	150	120	180	
	pmol/l	98.9	79.1	119	Beckman Dxl800
	pg/ml	134	107	161	
	pmol/l	171	137	205	Roche Elecsys
	pg/ml	232	186	278	
	pmol/l	105	84.0	126	Beckman Access
	pg/ml	142	114	170	
	pmol/l	156	125	187	Tosoh Series
	pg/ml	211	169	253	
	pmol/l	156	125	187	Vitros Eci
	pg/ml	211	169	253	
	pmol/l	130	104	156	Siemens Dimension
	pg/ml	176	141	211	
	pmol/l	135	108	162	Siemens Centaur CP
	pg/ml	183	146	220	
	pmol/l	175	140	210	Roche Cobas 4000/e411 Gen II
	pg/ml	237	190	284	
	pmol/l	167	134	200	Roche Cobas e601/602 Gen II
	pg/ml	226	182	270	
pmol/l	179	143	215	Mindray CL Series	
pg/ml	243	194	292		
pmol/l	112	89.6	134	Diasorin Liaison XL	
pg/ml	152	121	183		
pmol/l	159	127	191	Siemens Atellica IM	
pg/ml	215	172	258		
pmol/l	211	169	253	Abbott Alinity i	
pg/ml	286	229	343		
pmol/l	156	125	187	Roche Cobas e801 Gen II	
pg/ml	211	169	253		