

PRODUCT INFORMATION

IA3111 / IA3112

2028EC

The reconstituted stability for Immunoassay Premium Plus Level 3 - lot 2028EC for **Free PSA and Total PSA is 2 days, when stored at +2°C to +8°C.**

Free PSA and Total PSA are stable for 28 days, when frozen once and stored at -20°C.

CCS6934

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

CAT. NO. IA3111	GTIN: 05055273207279	SIZE: 12 x 5 ml
CAT. NO. IA3112	GTIN: 05055273207286	SIZE: 4 x 5 ml
LOT NO. 2028EC	EXPIRY: 2023-11-28	

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. Free PSA and Total PSA are stable for 2 days at +2°C to +8°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. Free PSA and Total PSA are stable for 28 days, when frozen once and stored at -20°C. 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 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 Plus - 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 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. Aldosterone is present in control levels 2 and level 3 only. Parathyroid Hormone (PTH) is present in the control, but no claim is made for the expected value or stability of this analyte.

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



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

Rev. 15 July '21 ne

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods
			low	high	
17-OH-Progesterone	nmol/l	31.8	23.9	39.8	Immunotech RIA
	ng/ml	10.5	7.91	13.1	
	nmol/l	48.3	36.2	60.4	ELISA
	ng/ml	16.0	12.0	20.0	
	nmol/l	34.8	26.1	43.5	Novatec ELISA
	ng/ml	11.5	8.64	14.4	
	nmol/l	33.4	25.1	41.8	DIAsource RIA
	ng/ml	11.1	8.31	13.9	
25-OH Vitamin D	nmol/l	103	77.3	129	Diasorin Liaison
	nmol/l	139	104	174	Siemens Centaur XP/XPT/Classic
	nmol/l	78.9	59.2	98.6	Roche Vitamin D Total
	nmol/l	92.0	69.0	115	Abbott Architect (3L52)
	nmol/l	112	84.0	140	Vitros ECi
	nmol/l	91.7	68.8	115	Tosoh Series
	nmol/l	92.0	69.0	115	BioMerieux Vidas
	nmol/l	97.8	73.4	122	Beckman Dxl 600/800
	nmol/l	100	75.0	125	Fujirebio Lumipulse G Series
	nmol/l	96.8	72.6	121	Beckman Access 25 OH Vitamin D Total
	nmol/l	105	78.8	131	LC/MS
	nmol/l	92.6	69.5	116	Abbott Architect (5P02)/ Alinity (8P45)
	nmol/l	104	78.0	130	Diasorin Liaison XL
	nmol/l	104	78.0	130	Roche Vitamin D Total II
ACTH	pmol/l	29.8	22.4	37.3	Siemens Immulite 2000/2500
	pg/ml	135	102	168	
	pmol/l	21.5	16.1	26.9	Roche Cobas 4000/E411
	pg/ml	97.7	73.2	122	
	pmol/l	21.3	16.0	26.6	Roche Cobas e601/602
	pg/ml	96.8	72.7	121	
	pmol/l	44.8	33.6	56.0	CIS IRMA
	pg/ml	204	153	255	
	pmol/l	29.5	22.1	36.9	Diasorin Liaison XL
	pg/ml	134	100	168	
Aldosterone	pmol/l	19.4	14.6	24.3	CIS RIA
	pg/ml	7.00	5.27	8.73	

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods
			low	high	
Aldosterone	pmol/l	397	298	496	Immunotech RIA
	pg/ml	143	108	178	
	pmol/l	148	111	185	IDS iSYS
	pg/ml	53.4	40.0	66.8	
	pmol/l	168	126	210	Diasorin Liaison XL
	pg/ml	60.6	45.5	75.7	
Alphafoetoprotein	KIU/l = IU/ml	170	136	204	Abbott Architect
	ng/ml	206	165	247	
	KIU/l = IU/ml	192	154	230	BioMerieux Vidas
	ng/ml	232	186	278	
	KIU/l = IU/ml	203	160	246	Siemens Centaur XP/XPT/Classic
	ng/ml	246	194	298	
	KIU/l = IU/ml	163	130	196	Siemens Immulite 2000/2500
	ng/ml	197	157	237	
	KIU/l = IU/ml	181	145	217	Siemens Immulite 1000
	ng/ml	219	175	263	
	KIU/l = IU/ml	171	137	205	Beckman DxI800
	ng/ml	207	166	248	
	KIU/l = IU/ml	197	158	236	Roche Elecsys
	ng/ml	238	191	285	
	KIU/l = IU/ml	185	148	222	Diasorin Liaison
	ng/ml	224	179	269	
	KIU/l = IU/ml	174	139	209	Beckman Access
	ng/ml	211	168	254	
	KIU/l = IU/ml	167	134	200	Tosoh Series
	ng/ml	202	162	242	
	KIU/l = IU/ml	190	152	228	Vitros ECi
	ng/ml	198	158	238	
	KIU/l = IU/ml	196	157	235	Roche Cobas e601/602
	ng/ml	237	190	284	
	KIU/l = IU/ml	292	234	350	CIS IRMA
	ng/ml	353	283	423	
	KIU/l = IU/ml	205	164	246	Roche Cobas 4000/E411
	ng/ml	248	198	298	
KIU/l = IU/ml	194	155	233	Siemens Dimension	
ng/ml	235	188	282		
KIU/l = IU/ml	200	158	242	Siemens Centaur CP	
ng/ml	242	191	293		
KIU/l = IU/ml	194	155	233	Diasorin Liaison XL	
ng/ml	235	188	282		
KIU/l = IU/ml	204	163	245	Siemens Atellica IM	
ng/ml	247	197	297		
KIU/l = IU/ml	172	138	206	Abbott Alinity i	
ng/ml	208	167	249		
KIU/l = IU/ml	190	152	228	Roche Cobas e801	
ng/ml	230	184	276		

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods
			low	high	
Amikacin	µmol/l	24.2	19.4	29.0	Roche Cobas 6000/8000
	µg/ml	14.2	11.4	17.0	
	µmol/l	24.2	19.4	29.0	Abbott Architect
	µg/ml	14.2	11.4	17.0	
	µmol/l	24.5	19.6	29.4	Thermo Scientific QMS Amikacin
	µg/ml	14.3	11.5	17.1	
Androstenedione	µmol/l	24.1	19.3	28.9	Gravimetric
	µg/ml	14.1	11.3	16.9	
	nmol/l	15.5	11.6	19.4	Beckman Coulter RIA
	ng/ml	4.45	3.33	5.57	
	nmol/l	30.7	23.0	38.4	Siemens Immulite 2000
	ng/ml	8.81	6.60	11.0	
Beta-2-microglobulin	nmol/l	13.8	10.4	17.3	LC/MS
	ng/ml	3.96	2.98	4.94	
	nmol/l	20.5	15.4	25.6	Diasorin Liaison XL
	ng/ml	5.88	4.42	7.34	
	µg/ml = mg/l	6.42	5.14	7.70	Abbott Architect
	µg/ml = mg/l	6.86	5.49	8.23	BioMerieux Vidas
C-Peptide	µg/ml = mg/l	6.38	5.10	7.66	Behring Nephelometer
	µg/ml = mg/l	5.48	4.38	6.58	Siemens Immulite 2000/2500
	µg/ml = mg/l	6.40	5.12	7.68	Diasorin Liaison
	µg/ml = mg/l	6.57	5.26	7.88	Tosoh Series
	µg/ml = mg/l	6.35	5.08	7.62	Roche Cobas 6000/8000
	µg/ml = mg/l	5.49	4.39	6.59	Fujirebio Lumipulse G Series
	µg/ml = mg/l	5.67	4.54	6.80	Diasorin Liaison XL
	µg/ml = mg/l	7.33	5.86	8.80	Siemens Atellica CH
	µg/ml = mg/l	6.58	5.26	7.90	Abbott Alinity
	nmol/l	3.540	2.660	4.430	Siemens Immulite 2000/2500
	ng/ml	10.7	8.03	13.4	
nmol/l	3.560	2.670	4.450	Roche Cobas e601/602	
ng/ml	10.7	8.06	13.3		
nmol/l	4.090	3.070	5.110	Siemens Immulite 1000	
ng/ml	12.3	9.27	15.3		
nmol/l	3.490	2.620	4.360	Diasorin Liaison	
ng/ml	10.5	7.91	13.1		
nmol/l	3.570	2.680	4.460	Roche Cobas 4000/E411	
ng/ml	10.8	8.09	13.5		
nmol/l	3.310	2.480	4.140	Abbott Architect	
ng/ml	9.99	7.49	12.5		
nmol/l	2.750	2.060	3.440	Siemens Centaur XP/XPT/Classic	
ng/ml	8.30	6.22	10.4		
nmol/l	3.380	2.540	4.230	Tosoh Series	
ng/ml	10.2	7.67	12.7		
nmol/l	3.720	2.790	4.650	Diasorin Liaison XL	
ng/ml	11.2	8.42	14.0		

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods
			low	high	
C-Peptide	nmol/l	3.390	2.540	4.240	Roche Cobas e801
	ng/ml	10.2	7.67	12.7	
	nmol/l	2.810	2.110	3.510	Siemens Atellica IM
	ng/ml	8.48	6.37	10.6	
	nmol/l	3.260	2.450	4.080	Abbott Alinity i
	ng/ml	9.84	7.40	12.3	
CA 15-3	U/ml	91.1	72.9	109	Abbott Architect
	U/ml	70.0	56.0	84.0	BioMerieux Vidas
	U/ml	80.2	55.3	105	Siemens Centaur XP/XPT/Classic
	U/ml	78.0	62.4	93.6	Siemens Immulite 2000/2500
	U/ml	92.4	73.9	111	Siemens Immulite 1000
	U/ml	32.6	26.1	39.1	Beckman Dxl800
	U/ml	75.8	60.6	91.0	Roche Elecsys
	U/ml	75.0	60.0	90.0	Diasorin Liaison
	U/ml	34.3	27.4	41.2	Beckman Access
	U/ml	84.6	67.7	102	Tosoh Series
	U/ml	71.4	57.1	85.7	Vitros ECi
	U/ml	77.2	61.8	92.6	Roche Cobas e601/602
	U/ml	76.8	61.4	92.2	Roche Cobas 4000/E411
	U/ml	97.3	77.8	117	Fujirebio Lumipulse G Series
	U/ml	38.8	31.0	46.6	Mindray CL-2000i
	U/ml	84.3	67.4	101	Diasorin Liaison XL
	U/ml	86.3	69.0	104	Siemens Atellica IM
U/ml	75.0	60.0	90.0	Roche Cobas e801	
U/ml	86.9	69.5	104	Abbott Alinity i	
CA 19-9	U/ml	100	80.0	120	BioMerieux Vidas
	U/ml	169	117	221	Siemens Centaur XP/XPT/Classic
	U/ml	950	760	1140	Siemens Immulite 2000/2500
	U/ml	1135	908	1362	Beckman Dxl800
	U/ml	166	133	199	Roche Elecsys
	U/ml	333	266	400	Diasorin Liaison
	U/ml	1264	1011	1517	Beckman Access
	U/ml	135	108	162	Tosoh Series
	U/ml	233	186	280	Vitros ECi
	U/ml	199	159	239	Abbott Architect XR/XR2/XRL
	U/ml	167	134	200	Roche Cobas e601/602
	U/ml	164	131	197	Roche Cobas 4000/E411
	U/ml	137	94.5	179	Siemens Centaur CP
	U/ml	113	90.4	136	Mindray CL-2000i
	U/ml	328	262	394	Diasorin Liaison XL
	U/ml	158	126	190	Siemens Atellica IM
	U/ml	164	131	197	Roche Cobas e801
U/ml	204	163	245	Abbott Alinity XR/XR2/XRL	
CA125	U/ml	159	127	191	Abbott Architect
	U/ml	144	115	173	BioMerieux Vidas
	U/ml	98.8	68.2	129	Siemens Centaur XP/XPT/Classic OV Kit

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods
			low	high	
CA125	U/ml	99.0	68.3	130	Siemens Centaur XP/XPT/Classic CA125 II kit
	U/ml	72.1	57.7	86.5	Siemens Immulite 2000/2500
	U/ml	79.0	63.2	94.8	Siemens Immulite 1000
	U/ml	50.8	40.6	61.0	Beckman Dxl800
	U/ml	176	141	211	Roche Elecsys
	U/ml	47.9	38.3	57.5	Beckman Access
	U/ml	274	219	329	Tosoh Series
	U/ml	107	85.6	128	Vitros ECi
	U/ml	175	140	210	Roche Cobas 4000/E411
	U/ml	177	142	212	Roche Cobas e601/602
	U/ml	170	136	204	Fujirebio Lumipulse G Series
	U/ml	103	71.1	135	Siemens Centaur CP CA125 II kit
	U/ml	63.3	50.6	76.0	Mindray CL-2000i
	U/ml	186	149	223	Diasorin Liaison XL
	U/ml	129	103	155	Siemens Atellica IM
	U/ml	160	128	192	Roche Cobas e801
U/ml	168	134	202	Abbott Alinity i	
Carbamazepine	µmol/l	64.4	51.5	77.3	Abbott Architect (CMIA)
	µg/ml	15.2	12.2	18.2	
	µmol/l	67.1	41.6	92.6	Siemens Centaur XP/XPT/Classic
	µg/ml	15.9	9.86	21.9	
	µmol/l	59.0	47.2	70.8	Siemens Dimension
	µg/ml	13.9	11.2	16.6	
	µmol/l	57.3	45.8	68.8	Siemens Immulite 2000/2500
	µg/ml	13.5	10.8	16.2	
	µmol/l	55.5	44.4	66.6	Siemens Immulite 1000
	µg/ml	13.1	10.5	15.7	
	µmol/l	67.1	53.7	80.5	Roche Integra
	µg/ml	15.9	12.7	19.1	
	µmol/l	63.1	50.5	75.7	Roche Cobas 6000/8000
	µg/ml	14.9	11.9	17.9	
	µmol/l	67.4	53.9	80.9	Beckman AU400/600/640/2700/5400
	µg/ml	15.9	12.7	19.1	
	µmol/l	51.1	40.9	61.3	Abbott Architect (PETINA)
	µg/ml	12.1	9.67	14.5	
	µmol/l	63.7	51.0	76.4	EMIT
	µg/ml	15.1	12.1	18.1	
µmol/l	61.0	48.8	73.2	Siemens Atellica CH	
µg/ml	14.4	11.5	17.3		
µmol/l	51.2	41.0	61.4	Abbott Alinity (PETINA)	
µg/ml	12.1	9.69	14.5		
µmol/l	72.2	57.8	86.6	Gravimetric	
µg/ml	17.1	13.7	20.5		
Carcinoembryonic Antigen (CEA)	ng/ml = µg/l	68.4	54.7	82.1	Abbott Architect
	ng/ml = µg/l	56.0	44.8	67.2	BioMerieux Vidas
	ng/ml = µg/l	57.8	39.9	75.7	Siemens Centaur XP/XPT/Classic

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods
			low	high	
Carcinoembryonic Antigen (CEA)	ng/ml = µg/l	50.8	40.6	61.0	CIS RIA Coated tube
	ng/ml = µg/l	74.4	59.5	89.3	Siemens Immulite 2000/2500
	ng/ml = µg/l	85.9	68.7	103	Siemens Immulite 1000
	ng/ml = µg/l	53.3	42.6	64.0	Beckman Dxl800
	ng/ml = µg/l	49.1	39.3	58.9	Roche Elecsys
	ng/ml = µg/l	49.9	39.9	59.9	Diasorin Liaison
	ng/ml = µg/l	54.7	43.8	65.6	Beckman Access
	ng/ml = µg/l	82.8	66.2	99.0	Tosoh Series
	ng/ml = µg/l	63.5	50.8	76.2	Vitros ECi
	ng/ml = µg/l	47.0	37.6	56.4	Roche Cobas e601/602
	ng/ml = µg/l	48.5	38.8	58.2	Roche Cobas 4000/E411
	ng/ml = µg/l	84.7	67.8	102	Fujirebio Lumipulse G Series
	ng/ml = µg/l	75.3	60.2	90.4	Boditech Med Inc i-CHROMA
	ng/ml = µg/l	59.5	41.1	77.9	Siemens Centaur CP
	ng/ml = µg/l	42.7	34.2	51.2	Mindray CL-2000i
	ng/ml = µg/l	55.7	44.6	66.8	Diasorin Liaison XL
	ng/ml = µg/l	54.0	43.2	64.8	Siemens Atellica IM
	ng/ml = µg/l	47.9	38.3	57.5	Roche Cobas e801
ng/ml = µg/l	68.3	54.6	82.0	Abbott Alinity i	
Cortisol	nmol/l	824	618	1030	Abbott Architect
	µg/dl	29.7	22.2	37.2	
	nmol/l	913	685	1141	BioMerieux Vidas
	µg/dl	32.9	24.7	41.1	
	nmol/l	1057	729	1385	Siemens Centaur XP/XPT/Classic
	µg/dl	38.1	26.3	49.9	
	nmol/l	763	572	954	CIS RIA
	µg/dl	27.5	20.6	34.4	
	nmol/l	857	643	1071	Siemens Immulite 2000/2500
	µg/dl	30.9	23.1	38.7	
	nmol/l	999	749	1249	Siemens Immulite 1000
	µg/dl	36.0	27.0	45.0	
	nmol/l	939	704	1174	Beckman Dxl800
	µg/dl	33.8	25.3	42.3	
	nmol/l	958	719	1198	Roche Elecsys
	µg/dl	34.5	25.9	43.1	
	nmol/l	924	693	1155	Diasorin Liaison
	µg/dl	33.3	24.9	41.7	
	nmol/l	1008	756	1260	Beckman Access
	µg/dl	36.3	27.2	45.4	
nmol/l	1014	761	1268	Tosoh Series	
µg/dl	36.5	27.4	45.6		
nmol/l	867	650	1084	Vitros ECi	
µg/dl	31.2	23.4	39.0		
nmol/l	1027	770	1284	Roche Cobas e601/602	
µg/dl	37.0	27.7	46.3		
nmol/l	1040	780	1300	Roche Cobas 4000/E411	
µg/dl	37.4	28.1	46.7		

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods
			low	high	
Cortisol	nmol/l	1061	732	1390	Siemens Centaur CP
	µg/dl	38.2	26.4	50.0	
	nmol/l	970	728	1213	Roche Cobas 4000/e411 Gen II
	µg/dl	34.9	26.2	43.6	
	nmol/l	882	662	1103	Roche Cobas e601/602 Gen II
	µg/dl	31.8	23.8	39.8	
	nmol/l	997	748	1246	Roche Elecsys Gen II
	µg/dl	35.9	26.9	44.9	
	nmol/l	965	724	1206	Diasorin Liaison XL
	µg/dl	34.7	26.1	43.3	
	nmol/l	1165	874	1456	Siemens Atellica IM
	µg/dl	41.9	31.5	52.3	
	nmol/l	901	676	1126	Roche Cobas e801
	µg/dl	32.4	24.3	40.5	
DHEA-S	nmol/l	827	620	1034	Abbott Alinity i
	µg/dl	29.8	22.3	37.3	
	nmol/l	882	662	1103	Roche Cobas e801 Gen II
	µg/dl	31.8	23.8	39.7	
	µmol/l	20.4	16.3	24.5	Abbott Architect
	µmol/l	17.7	14.2	21.2	Siemens Immulite 2000/2500
	µmol/l	15.4	12.3	18.5	Siemens Immulite 1000
	µmol/l	16.4	13.1	19.7	Beckman Dxl800
	µmol/l	25.7	20.6	30.8	Roche Elecsys
	µmol/l	17.6	14.1	21.1	Beckman Access
	µmol/l	16.4	13.1	19.7	Diasorin Liaison
	µmol/l	15.4	9.24	21.6	Siemens Centaur XP/XPT/Classic
	µmol/l	24.6	19.7	29.5	Roche Cobas 4000/E411
	µmol/l	25.3	20.2	30.4	Roche Cobas e601/602
Digoxin	µmol/l	12.4	9.92	14.9	Diasorin Liaison XL
	µmol/l	16.5	13.2	19.8	Siemens Atellica IM
	µmol/l	24.7	19.8	29.6	Roche Cobas e801
	nmol/l	4.00	3.20	4.80	Abbott Architect (CMIA)
	ng/ml	3.12	2.50	3.74	
	nmol/l	4.63	3.70	5.56	BioMerieux Vidas
	ng/ml	3.62	2.89	4.35	
	nmol/l	5.07	3.95	6.19	Siemens Centaur XP/XPT/Classic
	ng/ml	3.96	3.09	4.83	
	nmol/l	4.57	3.66	5.48	Siemens Dimension
	ng/ml	3.57	2.86	4.28	
	nmol/l	5.11	4.09	6.13	Siemens Immulite 2000/2500
	ng/ml	3.99	3.19	4.79	
	nmol/l	4.36	3.49	5.23	Beckman Dxl800
ng/ml	3.41	2.73	4.09		
nmol/l	4.74	3.79	5.69	Roche Integra	
ng/ml	3.70	2.96	4.44		

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods
			low	high	
Digoxin	nmol/l	4.56	3.65	5.47	Roche Cobas e601/602
	ng/ml	3.56	2.85	4.27	
	nmol/l	5.05	4.04	6.06	Beckman AU400/600/640/2700/5400
	ng/ml	3.94	3.16	4.72	
	nmol/l	4.90	3.92	5.88	Roche Cobas 4000/E411
	ng/ml	3.83	3.06	4.60	
	nmol/l	3.99	3.19	4.79	Abbott Architect (PETINA)
	ng/ml	3.12	2.49	3.75	
	nmol/l	4.70	3.76	5.64	Roche Cobas e801
	ng/ml	3.67	2.94	4.40	
	nmol/l	5.60	4.48	6.72	Siemens Atellica IM
	ng/ml	4.37	3.50	5.24	
	nmol/l	4.47	3.58	5.36	Siemens Atellica CH
	ng/ml	3.49	2.80	4.18	
	nmol/l	4.21	3.37	5.05	Abbott Alinity (CMIA)
	ng/ml	3.29	2.63	3.95	
nmol/l	4.21	3.37	5.05	Abbott Alinity (PETINA)	
ng/ml	3.29	2.63	3.95		
nmol/l	5.12	4.10	6.14	Gravimetric	
ng/ml	4.00	3.20	4.80		
Ferritin	ng/ml = µg/l	393	314	472	Abbott Architect
	ng/ml = µg/l	282	226	338	BioMerieux Vidas
	ng/ml = µg/l	310	242	378	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	315	252	378	Siemens Dimension
	ng/ml = µg/l	295	236	354	Siemens Immulite 2000/2500
	ng/ml = µg/l	257	206	308	Siemens Immulite 1000
	ng/ml = µg/l	244	195	293	Beckman DxI800
	ng/ml = µg/l	359	287	431	Roche Elecsys/Cobas e411
	ng/ml = µg/l	321	257	385	Diasorin Liaison
	ng/ml = µg/l	350	280	420	Roche Modular E170 / Roche Cobas e601/602
	ng/ml = µg/l	254	203	305	Beckman Access
	ng/ml = µg/l	250	200	300	Tosoh Series
	ng/ml = µg/l	217	174	260	Vitros ECI
	ng/ml = µg/l	349	279	419	Roche Cobas 4000/c311
	ng/ml = µg/l	284	227	341	Beckman AU400/600/640/2700/5400
	ng/ml = µg/l	279	218	340	Siemens Centaur CP
	ng/ml = µg/l	388	310	466	Diasorin Liaison XL
	ng/ml = µg/l	390	312	468	Abbott Alinity i
ng/ml = µg/l	294	235	353	Siemens Atellica IM	
ng/ml = µg/l	354	283	425	Roche Cobas e801	
Folate	nmol/l	18.6	14.1	23.1	Abbott Architect
	ng/ml	8.20	6.22	10.2	
	nmol/l	35.7	21.4	50.0	Siemens Centaur XP/XPT/Classic (enhanced kit)
	ng/ml	15.7	9.42	22.0	
	nmol/l	16.6	12.6	20.6	Siemens Immulite 2000
ng/ml	7.32	5.56	9.08		

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods
			low	high	
Folate	nmol/l	22.7	17.3	28.1	Beckman Dxl 600 / 800 - A14208
	ng/ml	10.0	7.63	12.4	
	nmol/l	23.0	17.5	28.5	Beckman Access
	ng/ml	10.1	7.72	12.5	
	nmol/l	29.9	22.7	37.1	Tosoh Series
	ng/ml	13.2	10.0	16.4	
	nmol/l	13.6	10.3	16.9	Vitros Eci
	ng/ml	6.00	4.54	7.46	
	nmol/l	13.3	10.1	16.5	Siemens Dimension
	ng/ml	5.87	4.45	7.29	
	nmol/l	22.9	17.4	28.4	Beckman Dxl 600 / 800 - A98032
	ng/ml	10.1	7.67	12.5	
	nmol/l	44.3	26.6	62.0	Siemens Centaur CP (enhanced kit)
	ng/ml	19.5	11.7	27.3	
	nmol/l	24.1	18.3	29.9	Roche Folate III - 04476433
	ng/ml	10.6	8.07	13.1	
	nmol/l	26.5	20.1	32.9	Roche Elecsys Folate
	ng/ml	11.7	8.86	14.5	
	nmol/l	24.1	18.3	29.9	Roche Folate III - 07559992
	ng/ml	10.6	8.07	13.1	
nmol/l	37.1	28.2	46.0	Siemens Atellica IM	
ng/ml	16.4	12.4	20.4		
nmol/l	20.7	15.7	25.7	Abbott Alinity i	
ng/ml	9.13	6.92	11.3		
nmol/l	23.4	17.8	29.0	Roche Cobas e801	
ng/ml	10.3	7.85	12.8		
Free T3	pmol/l	22.3	16.7	27.9	Abbott Architect, 2 point calibration
	ng/dl	1.45	1.09	1.81	
	pg/ml	14.5	10.9	18.1	
	pmol/l	22.3	16.7	27.9	BioMerieux Vidas
	ng/dl	1.45	1.09	1.81	
	pg/ml	14.5	10.9	18.1	
	pmol/l	21.1	12.7	29.5	Siemens Centaur XP/XPT/Classic
	ng/dl	1.37	0.822	1.92	
	pg/ml	13.7	8.22	19.2	
	pmol/l	15.0	11.3	18.8	Siemens Immulite 2000/2500
	ng/dl	0.975	0.735	1.22	
	pg/ml	9.77	7.36	12.2	
	pmol/l	15.3	11.5	19.1	Siemens Immulite 1000
	ng/dl	0.995	0.748	1.24	
	pg/ml	9.96	7.49	12.4	
	pmol/l	15.9	11.9	19.9	Beckman Dxl800
	ng/dl	1.03	0.774	1.29	
	pg/ml	10.4	7.75	13.1	
	pmol/l	27.6	20.7	34.5	Roche Elecsys
	ng/dl	1.79	1.35	2.23	
pg/ml	18.0	13.5	22.5		

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods
			low	high	
Free T3	pmol/l	30.8	23.1	38.5	Diasorin Liaison
	ng/dl	2.00	1.50	2.50	
	pg/ml	20.1	15.0	25.2	
	pmol/l	18.6	14.0	23.3	Beckman Access
	ng/dl	1.21	0.910	1.51	
	pg/ml	12.1	9.11	15.1	
	pmol/l	36.3	27.2	45.4	Tosoh Series
	ng/dl	2.36	1.77	2.95	
	pg/ml	23.6	17.7	29.5	
	pmol/l	35.0	26.3	43.8	Vitros ECI
	ng/dl	2.28	1.71	2.85	
	pg/ml	22.8	17.1	28.5	
	pmol/l	27.4	20.6	34.3	Roche Cobas 4000/E411
	ng/dl	1.78	1.34	2.22	
	pg/ml	17.8	13.4	22.2	
	pmol/l	27.9	20.9	34.9	Roche Cobas e601/602
	ng/dl	1.81	1.36	2.26	
	pg/ml	18.2	13.6	22.8	
	pmol/l	20.0	12.0	28.0	Siemens Centaur CP
	ng/dl	1.30	0.780	1.82	
	pg/ml	13.0	7.80	18.2	
	pmol/l	20.7	15.5	25.9	Mindray CL-2000i
	ng/dl	1.35	1.01	1.69	
	pg/ml	13.5	10.1	16.9	
	pmol/l	33.6	25.2	42.0	Diasorin Liaison XL
	ng/dl	2.18	1.64	2.72	
	pg/ml	21.9	16.4	27.4	
	pmol/l	22.2	16.7	27.8	Siemens Atellica IM
	ng/dl	1.44	1.09	1.79	
	pg/ml	14.5	10.9	18.1	
pmol/l	23.6	17.7	29.5	Abbott Alinity, 2 point cal	
ng/dl	1.53	1.15	1.91		
pg/ml	15.4	11.5	19.3		
pmol/l	22.4	16.8	28.0	Abbott Architect, 6 point calibration	
ng/dl	1.46	1.09	1.83		
pg/ml	14.6	10.9	18.3		
pmol/l	27.4	20.6	34.3	Roche Cobas e801	
ng/dl	1.78	1.34	2.22		
pg/ml	17.8	13.4	22.2		
pmol/l	22.6	17.0	28.3	Abbott Alinity, 6 point cal	
ng/dl	1.47	1.11	1.83		
pg/ml	14.7	11.1	18.3		
Free T4	pmol/l	41.9	31.4	52.4	Abbott Architect
	ng/dl	3.27	2.45	4.09	
	pg/ml	32.7	24.5	40.9	

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods
			low	high	
Free T4	pmol/l	40.7	30.5	50.9	Siemens Centaur XP/XPT/Classic
	ng/dl	3.17	2.38	3.96	
	pg/ml	31.7	23.8	39.6	
	pmol/l	50.2	37.7	62.8	CIS RIA Coated tube
	ng/dl	3.92	2.94	4.90	
	pg/ml	39.2	29.4	49.0	
	pmol/l	64.9	48.7	81.1	Siemens Immulite 2000/2500
	ng/dl	5.06	3.80	6.32	
	pg/ml	50.6	38.0	63.2	
	pmol/l	65.7	49.3	82.1	Siemens Immulite 1000
	ng/dl	5.12	3.85	6.39	
	pg/ml	51.2	38.5	63.9	
	pmol/l	52.3	39.2	65.4	Beckman Dxl800
	ng/dl	4.08	3.06	5.10	
	pg/ml	40.8	30.6	51.0	
	pmol/l	58.5	43.9	73.1	Roche Elecsys
	ng/dl	4.56	3.42	5.70	
	pg/ml	45.6	34.2	57.0	
	pmol/l	75.5	56.6	94.4	Diasorin Liaison
	ng/dl	5.89	4.41	7.37	
	pg/ml	58.9	44.1	73.7	
	pmol/l	47.5	35.6	59.4	Beckman Access
	ng/dl	3.71	2.78	4.64	
	pg/ml	37.1	27.8	46.4	
	pmol/l	61.8	46.4	77.3	Tosoh Series
	ng/dl	4.82	3.62	6.02	
	pg/ml	48.2	36.2	60.2	
	pmol/l	89.7	67.3	112	Vitros ECI
	ng/dl	7.00	5.25	8.75	
	pg/ml	70.0	52.5	87.5	
pmol/l	58.3	43.7	72.9	Roche Cobas e601/602	
ng/dl	4.55	3.41	5.69		
pg/ml	45.5	34.1	56.9		
pmol/l	48.5	36.4	60.6	Immunotech IRMA	
ng/dl	3.78	2.84	4.72		
pg/ml	37.8	28.4	47.2		
pmol/l	59.3	44.5	74.1	Roche Cobas 4000/E411	
ng/dl	4.63	3.47	5.79		
pg/ml	46.3	34.7	57.9		
pmol/l	65.0	48.8	81.3	Biomerieux Vidas FT4N Kit	
ng/dl	5.07	3.81	6.33		
pg/ml	50.7	38.1	63.3		
pmol/l	68.4	51.3	85.5	Siemens Dimension Exl LOCI	
ng/dl	5.34	4.00	6.68		
pg/ml	53.4	40.0	66.8		
pmol/l	43.9	32.9	54.9	Siemens Centaur CP	
ng/dl	3.42	2.57	4.27		
pg/ml	34.2	25.7	42.7		

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods
			low	high	
Free T4	pmol/l	49.0	36.8	61.3	Mindray CL-2000i
	ng/dl	3.82	2.87	4.77	
	pg/ml	38.2	28.7	47.7	
	pmol/l	91.0	68.3	114	Diasorin Liaison XL
	ng/dl	7.10	5.33	8.87	
	pg/ml	71.0	53.3	88.7	
	pmol/l	44.4	33.3	55.5	Siemens Atellica IM
	ng/dl	3.46	2.60	4.32	
	pg/ml	34.6	26.0	43.2	
	pmol/l	39.9	29.9	49.9	Abbott Alinity i
	ng/dl	3.11	2.33	3.89	
	pg/ml	31.1	23.3	38.9	
pmol/l	60.5	45.4	75.6	Roche Cobas e801	
ng/dl	4.72	3.54	5.90		
pg/ml	47.2	35.4	59.0		
FSH	mU/ml	54.3	43.4	65.2	Abbott Architect
	mU/ml	58.7	47.0	70.4	BioMerieux Vidas
	mU/ml	79.5	62.0	97.0	Siemens Centaur XP/XPT/Classic
	mU/ml	54.9	43.9	65.9	Siemens Immulite 2000/2500
	mU/ml	53.7	43.0	64.4	Siemens Immulite 1000
	mU/ml	61.0	48.8	73.2	Beckman DxI800
	mU/ml	51.0	40.8	61.2	Roche/BM Elecsys
	mU/ml	73.3	58.6	88.0	Diasorin Liaison
	mU/ml	67.4	53.9	80.9	Beckman Access
	mU/ml	61.7	49.4	74.0	Tosoh Series
	mU/ml	44.9	35.9	53.9	Vitros ECi
	mU/ml	54.2	43.4	65.0	Roche Cobas 4000/E411
	mU/ml	50.3	40.2	60.4	Roche Cobas e601/602
	mU/ml	47.4	37.9	56.9	Fujirebio Lumipulse G Series
	mU/ml	70.0	54.6	85.4	Siemens Centaur CP
	mU/ml	68.4	54.7	82.1	Mindray CL-2000i
	mU/ml	84.5	67.6	101	Diasorin Liaison XL
	mU/ml	83.9	67.1	101	Siemens Atellica IM
	mU/ml	53.2	42.6	63.8	Abbott Alinity i
mU/ml	53.2	42.6	63.8	Roche Cobas e801	
Gentamicin	µmol/l	11.2	8.96	13.4	Roche Integra
	µg/ml	5.35	4.28	6.42	
	µmol/l	12.2	9.27	15.1	Siemens Centaur XP/XPT/Classic
	µg/ml	5.83	4.43	7.23	
	µmol/l	11.9	9.52	14.3	Abbott Architect (CMIA)
	µg/ml	5.69	4.55	6.83	
	µmol/l	11.8	9.44	14.2	Siemens Dimension Vista
	µg/ml	5.64	4.51	6.77	
µmol/l	9.20	7.36	11.0	Roche Cobas 6000/8000 Online KIMS	
µg/ml	4.40	3.52	5.28		

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods
			low	high	
Gentamicin	µmol/l	10.2	8.16	12.2	Roche Cobas 6000/8000 CEDIA
	µg/ml	4.88	3.90	5.86	
	µmol/l	12.6	10.1	15.1	EMIT
	µg/ml	6.02	4.83	7.21	
	µmol/l	11.5	9.20	13.8	Siemens Atellica CH
	µg/ml	5.50	4.40	6.60	
	µmol/l	11.9	9.52	14.3	Abbott Alinity (PETINA)
	µg/ml	5.69	4.55	6.83	
Growth Hormone (GH)	µU/ml	42.1	33.7	50.5	Siemens Immulite 2000/2500
	ng/ml	14.0	11.2	16.8	
	µU/ml	40.4	32.3	48.5	Siemens Immulite 1000
	ng/ml	13.5	10.8	16.2	
	µU/ml	34.5	27.6	41.4	Beckman DxI800
	ng/ml	11.5	9.19	13.8	
	µU/ml	37.3	29.8	44.8	Beckman Access
	ng/ml	12.4	9.92	14.9	
	µU/ml	44.9	35.9	53.9	Tosoh Series
	ng/ml	15.0	12.0	18.0	
	µU/ml	37.6	30.1	45.1	Diasorin Liaison
	ng/ml	12.5	10.0	15.0	
	µU/ml	38.4	30.7	46.1	Roche Cobas 4000/E411
	ng/ml	12.8	10.2	15.4	
	µU/ml	38.1	30.5	45.7	Roche Cobas e601/602
	ng/ml	12.7	10.2	15.2	
µU/ml	40.7	32.6	48.8	IDS iSYS	
ng/ml	13.6	10.9	16.3		
µU/ml	38.5	30.8	46.2	Diasorin Liaison XL	
ng/ml	12.8	10.3	15.3		
µU/ml	37.7	30.2	45.2	Roche Cobas e801	
ng/ml	12.6	10.1	15.1		
Immunoglobulin E	KIU/I = IU/ml	525	420	630	Abbott Architect
	KIU/I = IU/ml	504	403	605	BioMerieux Vidas
	KIU/I = IU/ml	574	344	804	Siemens Centaur XP/XPT/Classic
	KIU/I = IU/ml	592	474	710	Siemens Immulite 2000/2500
	KIU/I = IU/ml	594	475	713	Siemens Immulite 1000
	KIU/I = IU/ml	582	466	698	Roche Elecsys
	KIU/I = IU/ml	544	435	653	Pharmacia Unicap
	KIU/I = IU/ml	507	406	608	Tosoh Series
	KIU/I = IU/ml	603	482	724	Roche Cobas 4000/E411
	KIU/I = IU/ml	576	461	691	Roche Cobas e601/602
	KIU/I = IU/ml	585	351	819	Siemens Centaur CP
	KIU/I = IU/ml	569	455	683	Siemens Atellica IM
KIU/I = IU/ml	587	470	704	Roche Cobas e801	

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods
			low	high	
Immunoglobulin E	KIU/l = IU/ml	530	424	636	Abbott Alinity i
Insulin	mU/l	26.5	19.9	33.1	Siemens Centaur XP/XPT/Classic
	µU/ml	26.5	19.9	33.1	
	mU/l	8.37	6.28	10.5	Siemens Immulite 2000
	µU/ml	8.37	6.28	10.5	
	mU/l	30.1	22.6	37.6	Roche Elecsys
	µU/ml	30.1	22.6	37.6	
	mU/l	24.8	18.6	31.0	Beckman Access
	µU/ml	24.8	18.6	31.0	
	mU/l	22.8	17.1	28.5	Abbott Architect
	µU/ml	22.8	17.1	28.5	
	mU/l	31.3	23.5	39.1	Tosoh Series
	µU/ml	31.3	23.5	39.1	
	mU/l	29.6	22.2	37.0	Roche Cobas 4000/E411
	µU/ml	29.6	22.2	37.0	
	mU/l	23.5	17.6	29.4	Beckman Dxl 600/800
	µU/ml	23.5	17.6	29.4	
	mU/l	31.9	23.9	39.9	Diasorin Liaison
	µU/ml	31.9	23.9	39.9	
	mU/l	29.5	22.1	36.9	Roche Cobas 6000/8000
	µU/ml	29.5	22.1	36.9	
mU/l	27.7	20.8	34.6	Siemens Centaur CP	
µU/ml	27.7	20.8	34.6		
mU/l	35.6	26.7	44.5	Diasorin Liaison XL	
µU/ml	35.6	26.7	44.5		
mU/l	27.0	20.3	33.8	Siemens Atellica IM	
µU/ml	27.0	20.3	33.7		
mU/l	21.1	15.8	26.4	Abbott Alinity i	
µU/ml	21.1	15.8	26.4		
Luteinising Hormone (LH)	mU/ml	46.3	37.0	55.6	Abbott Architect
	mU/ml	56.3	45.0	67.6	BioMerieux Vidas
	mU/ml	51.5	39.7	63.3	Siemens Centaur XP/XPT/Classic
	mU/ml	74.1	59.3	88.9	Siemens Immulite 2000
	mU/ml	77.9	62.3	93.5	Siemens Immulite 1000
	mU/ml	43.1	34.5	51.7	Beckman Dxl800
	mU/ml	56.9	45.5	68.3	Roche Elecsys
	mU/ml	44.5	35.6	53.4	Beckman Access
	mU/ml	52.6	42.1	63.1	Tosoh Series
	mU/ml	59.4	47.5	71.3	Vitros Eci
	mU/ml	58.1	46.5	69.7	Roche Cobas 4000/E411
	mU/ml	57.2	45.8	68.6	Roche Cobas e601/602
	mU/ml	49.4	39.5	59.3	Fujirebio Lumipulse G Series
	mU/ml	53.4	41.1	65.7	Siemens Centaur CP
	mU/ml	60.1	48.1	72.1	Mindray CL-2000i
	mU/ml	72.9	58.3	87.5	Diasorin Liaison XL
mU/ml	53.4	42.7	64.1	Siemens Atellica IM	

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods
			low	high	
Luteinising Hormone (LH)	mU/ml	45.3	36.2	54.4	Abbott Alinity i
	mU/ml	57.6	46.1	69.1	Roche Cobas e801
Oestradiol	pmol/l	1116	893	1339	Abbott Architect
	pg/ml	304	243	365	
	pmol/l	2548	2038	3058	BioMerieux Vidas
	pg/ml	693	554	832	
	pmol/l	2160	1339	2981	Siemens Centaur XP/XPT/Classic
	pg/ml	588	365	811	
	pmol/l	2089	1671	2507	Siemens Immulite 2000/2500
	pg/ml	568	455	681	
	pmol/l	1341	1073	1609	Beckman Dxl800
	pg/ml	365	292	438	
	pmol/l	1297	1038	1556	Roche Elecsys (Estradiol II)
	pg/ml	353	282	424	
	pmol/l	1611	1289	1933	Beckman Access
	pg/ml	438	351	525	
	pmol/l	1647	1318	1976	Tosoh (E2)
	pg/ml	448	358	538	
	pmol/l	2257	1806	2708	Vitros Eci
	pg/ml	614	491	737	
	pmol/l	1310	1048	1572	Roche Cobas e601/602 (Estradiol II)
	pg/ml	356	285	427	
	pmol/l	1297	1038	1556	Roche Cobas 4000/E411 (Estradiol II)
	pg/ml	353	282	424	
	pmol/l	2159	1339	2979	Siemens Centaur XP/XPT/Classic Enhanced (eE2)
	pg/ml	587	364	810	
	pmol/l	1624	1299	1949	Tosoh (iE2-hsE2)
	pg/ml	442	353	531	
	pmol/l	2283	1415	3151	Siemens Centaur CP
	pg/ml	621	385	857	
	pmol/l	2158	1338	2978	Siemens Centaur CP Enhanced (eE2)
	pg/ml	587	364	810	
	pmol/l	1329	1063	1595	Roche Cobas e601/602 (Estradiol III)
	pg/ml	361	289	433	
pmol/l	1274	1019	1529	Roche Elecsys (Estradiol III)	
pg/ml	347	277	417		
pmol/l	1315	1052	1578	Roche Cobas 4000/E411 (Estradiol III)	
pg/ml	358	286	430		
pmol/l	984	787	1181	Diasorin Liaison XL	
pg/ml	268	214	322		
pmol/l	1384	1107	1661	Beckman Access / Access 2 Sensitive B84493	
pg/ml	376	301	451		
pmol/l	1296	1037	1555	Beckman Dxl600/800 Sensitive B84493	
pg/ml	353	282	424		
pmol/l	2188	1750	2626	Siemens Atellica IM	
pg/ml	595	476	714		

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods
			low	high	
Oestradiol	pmol/l	1058	846	1270	Abbott Alinity i
	pg/ml	288	230	346	
	pmol/l	1309	1047	1571	Roche Cobas e801 (Estradiol III)
	pg/ml	356	285	427	
Paracetamol	mmol/l	0.505	0.404	0.606	Abbott Architect
	mg/l	76.4	61.1	91.7	
	mmol/l	0.479	0.383	0.575	Roche Cobas c501/502/503/701/702
	mg/l	72.5	57.9	87.1	
	mmol/l	0.509	0.407	0.611	Beckman AU Instruments
	mg/l	77.0	61.6	92.4	
	mmol/l	0.505	0.404	0.606	EMIT
	mg/l	76.4	61.1	91.7	
Phenobarbital	mmol/l	0.502	0.402	0.602	Abbott Alinity
	mg/l	76.0	60.8	91.2	
	mmol/l	0.529	0.423	0.635	Gravimetric
	mg/l	80.0	64.0	96.0	
	µmol/l	123	98.4	148	Abbott Architect (CMIA)
	µg/ml	28.5	22.8	34.2	
	µmol/l	120	96.0	144	Roche Cobas e601/602/801
	µg/ml	27.8	22.3	33.3	
	µmol/l	130	104	156	Siemens Immulite 2000/2500
	µg/ml	30.2	24.1	36.3	
	µmol/l	121	96.8	145	Beckman AU400/600/640/2700/5400
	µg/ml	28.1	22.5	33.7	
	µmol/l	168	123	213	Siemens Centaur XP/XPT/Classic
	µg/ml	39.0	28.5	49.5	
µmol/l	115	92.0	138	Roche Integra	
µg/ml	26.7	21.3	32.1		
µmol/l	119	95.2	143	Siemens Immulite 1000	
µg/ml	27.6	22.1	33.1		
µmol/l	122	97.6	146	Siemens Atellica CH	
µg/ml	28.3	22.6	34.0		
µmol/l	108	86.4	130	Abbott Alinity (PETINA)	
µg/ml	25.1	20.0	30.2		
µmol/l	121	96.8	145	Gravimetric	
µg/ml	28.1	22.5	33.6		
Phenytoin	µmol/l	94.3	75.4	113	Abbott Architect
	µg/ml	23.8	19.0	28.6	
	µmol/l	127	99.1	155	Siemens Centaur XP/XPT/Classic
	µg/ml	32.1	25.0	39.2	
	µmol/l	103	82.4	124	Siemens Dimension
	µg/ml	26.0	20.8	31.2	
µmol/l	84.8	67.8	102	Siemens Immulite 2000/2500	
µg/ml	21.4	17.1	25.7		
µmol/l	92.6	74.1	111	Roche Integra	
µg/ml	23.4	18.7	28.1		

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods
			low	high	
Phenytoin	µmol/l	93.8	75.0	113	Roche Cobas 6000/8000
	µg/ml	23.7	18.9	28.5	
	µmol/l	97.3	77.8	117	EMIT
	µg/ml	24.6	19.6	29.6	
	µmol/l	102	81.6	122	Siemens Atellica CH
	µg/ml	25.8	20.6	31.0	
	µmol/l	99.9	79.9	120	Abbott Alinity
	µg/ml	25.2	20.2	30.2	
Primidone	µmol/l	32.7	26.2	39.2	Gravimetric
	µg/ml	7.14	5.72	8.56	
Progesterone	nmol/l	90.1	72.1	108	Abbott Architect
	ng/ml	28.2	22.6	33.8	
	nmol/l	148	118	178	BioMerieux Vidas
	ng/ml	46.3	36.9	55.7	
	nmol/l	71.2	50.6	91.8	Siemens Centaur XP/XPT/Classic
	ng/ml	22.3	15.8	28.8	
	nmol/l	77.2	61.8	92.6	Siemens Immulite 2000/2500
	ng/ml	24.2	19.3	29.1	
	nmol/l	83.9	67.1	101	Siemens Immulite 1000
	ng/ml	26.3	21.0	31.6	
	nmol/l	93.8	75.0	113	Beckman Dxl Prog Cal 33555
	ng/ml	29.4	23.5	35.3	
	nmol/l	99.6	79.7	120	Roche Elecsys (Prog. II)
	ng/ml	31.2	24.9	37.5	
	nmol/l	96.4	77.1	116	Beckman Access Prog Cal 33555
	ng/ml	30.2	24.1	36.3	
	nmol/l	111	88.8	133	Tosoh Series
	ng/ml	34.7	27.8	41.6	
	nmol/l	102	81.6	122	Vitros Eci
	ng/ml	31.9	25.5	38.3	
nmol/l	97.2	77.8	117	Roche Cobas 4000/e411 (Prog. II)	
ng/ml	30.4	24.4	36.4		
nmol/l	99.6	79.7	120	Roche Cobas e601/602 (Prog. II)	
ng/ml	31.2	24.9	37.5		
nmol/l	88.0	70.4	106	Diasorin Liaison	
ng/ml	27.5	22.0	33.0		
nmol/l	85.8	68.6	103	Beckman Dxl Prog DE Cal A80773	
ng/ml	26.9	21.5	32.3		
nmol/l	92.0	73.6	110	Beckman Access Prog DE Cal A80773	
ng/ml	28.8	23.0	34.6		
nmol/l	73.9	52.5	95.3	Siemens Centaur CP	
ng/ml	23.1	16.4	29.8		
nmol/l	128	102	154	Mindray CL-2000i	
ng/ml	40.1	31.9	48.3		

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods
			low	high	
Progesterone	nmol/l	102	81.6	122	Fujirebio Lumipulse G Series
	ng/ml	31.9	25.5	38.3	
	nmol/l	99.4	79.5	119	Roche Cobas e601/602 (Prog. III)
	ng/ml	31.1	24.9	37.3	
	nmol/l	97.5	78.0	117	Roche Elecsys (Prog. III)
	ng/ml	30.5	24.4	36.6	
	nmol/l	99.4	79.5	119	Roche Cobas 4000/e411 (Prog. III)
	ng/ml	31.1	24.9	37.3	
	nmol/l	96.3	77.0	116	Diasorin Liaison XL
	ng/ml	30.1	24.1	36.1	
	nmol/l	84.9	67.9	102	Abbott Alinity i
	ng/ml	26.6	21.3	31.9	
	nmol/l	98.5	78.8	118	Roche Cobas e801 (Prog. III)
	ng/ml	30.8	24.7	36.9	
Prolactin	µU/ml	1109	887	1331	Abbott Architect
	µU/ml	1308	1046	1570	BioMerieux Vidas
	µU/ml	900	675	1125	Siemens Centaur XP/XPT/Classic
	µU/ml	890	712	1068	Siemens Immulite 2000/2500
	µU/ml	1061	849	1273	Siemens Immulite 1000
	µU/ml	858	686	1030	Beckman Dxl800
	µU/ml	1083	866	1300	Roche Elecsys
	µU/ml	1111	889	1333	Diasorin Liaison
	µU/ml	904	723	1085	Beckman Access
	µU/ml	1001	801	1201	Tosoh Series
	µU/ml	914	731	1097	Vitros ECi
	µU/ml	1074	859	1289	Roche Elecsys/E170/Cobas 6000/8000 PRLII
	µU/ml	974	779	1169	Immunotech IRMA
	µU/ml	1114	891	1337	Roche Cobas 4000/E411
	µU/ml	1072	858	1286	Roche Cobas e601/602
	µU/ml	1240	992	1488	Fujirebio Lumipulse G Series
	µU/ml	924	693	1155	Siemens Centaur CP
	µU/ml	1279	1023	1535	Mindray CL-2000i
	µU/ml	1113	890	1336	Diasorin Liaison XL
	µU/ml	936	749	1123	Siemens Atellica IM
µU/ml	1096	877	1315	Abbott Alinity i	
µU/ml	1027	822	1232	Roche Cobas e801 PRL II	
PSA Free	ng/ml = µg/l	16.5	12.4	20.6	Abbott Architect
	ng/ml = µg/l	16.3	12.2	20.4	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	13.0	9.75	16.3	Siemens Immulite 2000/2500
	ng/ml = µg/l	13.2	9.90	16.5	Siemens Immulite 1000
	ng/ml = µg/l	18.5	13.9	23.1	Beckman DXI standardised to Hybritech
	ng/ml = µg/l	15.5	11.6	19.4	Roche Elecsys
	ng/ml = µg/l	10.6	7.95	13.3	Diasorin Liaison
	ng/ml = µg/l	19.7	14.8	24.6	Beckman Access standardised to Hybritech
	ng/ml = µg/l	13.6	10.2	17.0	Tosoh Series
	ng/ml = µg/l	15.1	11.3	18.9	Roche Cobas 4000/E411

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods
			low	high	
PSA Free	ng/ml = µg/l	15.2	11.4	19.0	Roche Cobas e601/602
	ng/ml = µg/l	14.2	10.7	17.8	Siemens Dimension Vista
	ng/ml = µg/l	16.2	12.2	20.3	Beckman DxI800 standardised to WHO IRP96/670
	ng/ml = µg/l	18.0	13.5	22.5	Beckman Access standardised to WHO IRP96/670
	ng/ml = µg/l	14.5	10.9	18.1	Ortho Vitros 3600/5600/ECi PSA II
	ng/ml = µg/l	13.7	10.3	17.1	Fujirebio Lumipulse G Series
	ng/ml = µg/l	10.1	7.58	12.6	Diasorin Liaison XL
	ng/ml = µg/l	16.3	12.2	20.4	Siemens Atellica IM
	ng/ml = µg/l	16.5	12.4	20.6	Abbott Alinity i
PSA Total	ng/ml = µg/l	15.0	11.3	18.8	Roche Cobas e801
	ng/ml = µg/l	14.3	10.7	17.9	Abbott Architect
	ng/ml = µg/l	19.5	14.6	24.4	BioMerieux Vidas
	ng/ml = µg/l	18.2	13.7	22.8	bioMerieux VIDAS TPSA
	ng/ml = µg/l	17.0	12.8	21.3	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	16.5	12.4	20.6	Siemens Immulite 2000/2500 1st generation
	ng/ml = µg/l	15.6	11.7	19.5	Siemens Immulite 1000 1st generation
	ng/ml = µg/l	17.8	13.4	22.3	Beckman DxI standardisd to Hybritech
	ng/ml = µg/l	13.9	10.4	17.4	Beckman DxI800 standardised to WHO IRP96/670
	ng/ml = µg/l	18.8	14.1	23.5	Roche Elecsys
	ng/ml = µg/l	12.5	9.38	15.6	Diasorin Liaison
	ng/ml = µg/l	19.2	14.4	24.0	Beckman Access standardised to Hybritech
	ng/ml = µg/l	18.6	14.0	23.3	Beckman Access standardised to WHO IRP96/670
	ng/ml = µg/l	14.1	10.6	17.6	Tosoh Series
	ng/ml = µg/l	18.1	13.6	22.6	Vitros ECi
	ng/ml = µg/l	17.5	13.1	21.9	CIS RIA Coated tube
	ng/ml = µg/l	19.2	14.4	24.0	Roche Cobas 4000/E411
	ng/ml = µg/l	18.6	14.0	23.3	Roche Cobas e601/602
	ng/ml = µg/l	14.0	10.5	17.5	Fujirebio Lumipulse G Series
	ng/ml = µg/l	18.2	13.7	22.8	Ortho Vitros 3600/5600/ECi PSA II
	ng/ml = µg/l	16.7	12.5	20.9	Siemens Centaur CP
ng/ml = µg/l	13.1	9.83	16.4	Diasorin Liaison XL	
ng/ml = µg/l	18.0	13.5	22.5	Siemens Atellica IM	
ng/ml = µg/l	14.5	10.9	18.1	Abbott Alinity i	
ng/ml = µg/l	18.5	13.9	23.1	Roche Cobas e801	
Salicylic Acid	mmol/l	2.85	2.28	3.42	Roche Cobas c501/502/503
	mg/dl	39.4	31.5	47.3	
	mmol/l	3.05	2.44	3.66	EMIT
	mg/dl	42.1	33.7	50.5	
	mmol/l	2.88	2.30	3.46	Gravimetric
SHBG	mg/dl	39.8	31.8	47.8	
	nmol/l	37.6	30.1	45.1	Siemens Immulite 2000/2500
	nmol/l	38.0	30.4	45.6	Abbott Architect
	nmol/l	37.9	30.3	45.5	Beckman DxI800
	nmol/l	37.9	30.3	45.5	Siemens Atellica IM
	nmol/l	34.7	27.8	41.6	Roche analysers - 413417/15
nmol/l	34.3	27.4	41.2	Roche Cobas e801 - 413429	

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods
			low	high	
SHBG	nmol/l	36.0	28.8	43.2	Abbott Alinity i
T Uptake	%U	37.7	30.9	44.5	Siemens Immulite 2000
Testosterone	nmol/l	28.2	22.6	33.8	Abbott Architect
	ng/ml	8.12	6.51	9.73	
	ng/dl	812	651	973	
	nmol/l	23.1	18.5	27.7	BioMerieux Vidas
	ng/ml	6.65	5.33	7.97	
	ng/dl	665	533	797	
	nmol/l	24.7	18.0	31.4	Siemens Centaur XP/XPT/Classic
	ng/ml	7.11	5.19	9.03	
	ng/dl	711	519	903	
	nmol/l	35.6	28.5	42.7	Siemens Immulite 2000/2500
	ng/ml	10.3	8.21	12.4	
	ng/dl	1025	821	1229	
	nmol/l	22.1	17.7	26.5	Beckman DxI800
	ng/ml	6.36	5.10	7.62	
	ng/dl	636	510	762	
	nmol/l	25.9	20.7	31.1	Beckman Access
	ng/ml	7.46	5.96	8.96	
	ng/dl	746	596	896	
	nmol/l	38.9	31.1	46.7	Tosoh Series
	ng/ml	11.2	8.96	13.4	
	ng/dl	1120	896	1344	
	nmol/l	38.7	31.0	46.4	Vitros ECi
	ng/ml	11.1	8.93	13.3	
	ng/dl	1115	893	1337	
	nmol/l	28.7	23.0	34.4	Roche Cobas e601/602 Test II
	ng/ml	8.27	6.62	9.92	
	ng/dl	827	662	992	
	nmol/l	27.6	22.1	33.1	Roche Elecsys Test II
ng/ml	7.95	6.36	9.54		
ng/dl	795	636	954		
nmol/l	29.4	23.5	35.3	Roche Cobas 4000/e411 Test II	
ng/ml	8.47	6.77	10.2		
ng/dl	847	677	1017		
nmol/l	27.7	22.2	33.2	Abbott Architect 2nd Generation	
ng/ml	7.98	6.39	9.57		
ng/dl	798	639	957		
nmol/l	27.0	21.6	32.4	Boditech Med Inc i-CHROMA	
ng/ml	7.78	6.22	9.34		
ng/dl	778	622	934		
nmol/l	23.9	19.1	28.7	BioMerieux Vidas Testosterone II	
ng/ml	6.88	5.50	8.26		
ng/dl	688	550	826		
nmol/l	42.1	33.7	50.5	Mindray CL-2000i	
ng/ml	12.1	9.71	14.5		
ng/dl	1212	971	1453		

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods
			low	high	
Testosterone	nmol/l	25.3	18.5	32.1	Siemens Centaur TST II
	ng/ml	7.29	5.32	9.26	
	ng/dl	729	532	926	
	nmol/l	11.7	9.36	14.0	Diasorin Liaison XL
	ng/ml	3.37	2.70	4.04	
	ng/dl	337	270	404	
	nmol/l	25.3	20.2	30.4	Siemens Atellica IM
	ng/ml	7.29	5.82	8.76	
	ng/dl	729	582	876	
	nmol/l	28.1	22.5	33.7	Roche Cobas e801 Test II
	ng/ml	8.09	6.48	9.70	
	ng/dl	809	648	970	
	nmol/l	28.0	22.4	33.6	Abbott Alinity i
	ng/ml	8.06	6.45	9.67	
ng/dl	806	645	967		
Theophylline	µmol/l	152	122	182	Siemens Centaur XP/XPT/Classic
	µg/ml	27.4	22.0	32.8	
	µmol/l	167	134	200	Roche Integra
	µg/ml	30.1	24.1	36.1	
	µmol/l	154	123	185	Abbott Architect (CMIA)
	µg/ml	27.8	22.2	33.4	
	µmol/l	156	125	187	Roche Cobas 6000/8000
	µg/ml	28.1	22.5	33.7	
	µmol/l	164	131	197	Beckman AU400/600/640/2700/5400
	µg/ml	29.6	23.6	35.6	
Thyroglobulin	ng/ml	31.0	23.3	38.8	Siemens Immulite 1000
	ng/ml	31.7	23.8	39.6	Siemens Immulite 2000
	ng/ml	74.7	56.0	93.4	Roche Elecsys
	ng/ml	63.2	47.4	79.0	Beckman DxI800
	ng/ml	71.5	53.6	89.4	Roche Cobas 4000/E411
	ng/ml	42.2	31.7	52.8	Diesse Chorus
	ng/ml	69.1	51.8	86.4	Roche Cobas e601/602
	ng/ml	64.7	48.5	80.9	Beckman Access
	ng/ml	80.1	60.1	100	Abbott Architect 2000i
	ng/ml	74.3	55.7	92.9	Tosoh Series
	ng/ml	69.8	52.4	87.3	Roche Cobas e601/602 Tg II
	ng/ml	72.1	54.1	90.1	Roche Elecsys TGII
	ng/ml	70.9	53.2	88.6	Roche Cobas 4000/E411 TGII
	ng/ml	66.4	49.8	83.0	Diasorin Liaison XL
	ng/ml	79.7	59.8	100	Roche Cobas e801 Tg II
	ng/ml	77.3	58.0	96.6	Abbott Alinity i
	Thyroid Stimulating Hormone	µU/ml = mIU/l	17.5	14.0	21.0
µU/ml = mIU/l		13.9	11.1	16.7	bioMerieux VIDAS TSH

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods	
			low	high		
Thyroid Stimulating Hormone	µU/ml = mIU/l	14.4	11.5	17.3	bioMerieux VIDAS TSH3 Ultrasensitive	
	µU/ml = mIU/l	21.8	14.8	28.8	Siemens Centaur XP/XPT/Classic	
	µU/ml = mIU/l	23.3	18.6	28.0	CIS IRMA	
	µU/ml = mIU/l	20.8	14.1	27.5	Siemens Centaur XP/XPT/Classic 3rd Generation	
	µU/ml = mIU/l	19.4	15.5	23.3	Siemens Immulite 2000/2500	
	µU/ml = mIU/l	20.9	16.7	25.1	Siemens Immulite 1000	
	µU/ml = mIU/l	17.4	13.9	20.9	Beckman Dxl800 Fast TSH	
	µU/ml = mIU/l	17.7	14.2	21.2	Beckman Dxl800	
	µU/ml = mIU/l	19.3	15.4	23.2	Roche Elecsys	
	µU/ml = mIU/l	33.6	26.9	40.3	Diasorin Liaison	
	µU/ml = mIU/l	18.1	14.5	21.7	Beckman Access Fast TSH	
	µU/ml = mIU/l	18.5	14.8	22.2	Beckman Access hyperTSH 3rd Generation	
	µU/ml = mIU/l	22.9	18.3	27.5	Tosoh Series	
	µU/ml = mIU/l	28.1	22.5	33.7	Vitros ECi	
	µU/ml = mIU/l	19.8	15.8	23.8	Roche Cobas 4000/E411	
	µU/ml = mIU/l	19.5	15.6	23.4	Roche Cobas e601/602	
	µU/ml = mIU/l	18.1	14.5	21.7	Beckman Dxl800 Hyper TSH	
	µU/ml = mIU/l	16.8	13.4	20.2	Siemens Dimension Vista LOCI	
	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	270	216	324	Abbott Architect	
	IU/ml	0.270	0.216	0.324		
	mU/ml=IU/l	602	482	722	BioMerieux Vidas	
	IU/ml	0.602	0.482	0.722		
	mU/ml=IU/l	240	144	336	Siemens Centaur XP/XPT/Classic	
	IU/ml	0.240	0.144	0.336		
	mU/ml=IU/l	568	454	682	Siemens Dimension	
	IU/ml	0.568	0.454	0.682		
	mU/ml=IU/l	687	550	824	Siemens Immulite 2000	
	IU/ml	0.687	0.550	0.824		
	mU/ml=IU/l	681	545	817	Siemens Immulite 1000	
	IU/ml	0.681	0.545	0.817		
	mU/ml=IU/l	269	215	323	Beckman Dxl800	
	IU/ml	0.269	0.215	0.323		
	mU/ml=IU/l	264	211	317	Diasorin Liaison	
	IU/ml	0.264	0.211	0.317		
mU/ml=IU/l	363	290	436	Roche Cobas Core EIA		
IU/ml	0.363	0.290	0.436			

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods
			low	high	
Total Beta hCG	mU/ml=IU/l	269	215	323	Beckman Access
	IU/ml	0.269	0.215	0.323	
	mU/ml=IU/l	575	460	690	Tosoh Series
	IU/ml	0.575	0.460	0.690	
	mU/ml=IU/l	599	479	719	Vitros Eci
	IU/ml	0.599	0.479	0.719	
	mU/ml=IU/l	398	318	478	Roche hCG STAT (Intact)
	IU/ml	0.398	0.318	0.478	
	mU/ml=IU/l	356	285	427	Roche hCG+Beta
	IU/ml	0.356	0.285	0.427	
	mU/ml=IU/l	289	231	347	Beckman Access Total BhCG (5th IS)
	IU/ml	0.289	0.231	0.347	
	mU/ml=IU/l	283	226	340	Beckman Dxl Total BhCG (5th IS)
	IU/ml	0.283	0.226	0.340	
	mU/ml=IU/l	221	133	309	Siemens Centaur CP
	IU/ml	0.221	0.133	0.309	
	mU/ml=IU/l	273	218	328	Diasorin Liaison XL
	IU/ml	0.273	0.218	0.328	
	mU/ml=IU/l	246	197	295	Siemens Atellica IM
	IU/ml	0.246	0.197	0.295	
mU/ml=IU/l	264	211	317	Abbott Alinity i	
IU/ml	0.264	0.211	0.317		
mU/ml=IU/l	344	275	413	Roche hCG+Beta e801	
IU/ml	0.344	0.275	0.413		
Total T3	nmol/l	5.07	3.80	6.34	Abbott Architect
	ng/ml	3.30	2.47	4.13	
	ng/dl	330	247	413	
	nmol/l	5.65	4.24	7.06	BioMerieux Vidas
	ng/ml	3.68	2.76	4.60	
	ng/dl	368	276	460	
	nmol/l	6.77	5.08	8.46	Siemens Centaur XP/XPT/Classic
	ng/ml	4.41	3.31	5.51	
	ng/dl	441	331	551	
	nmol/l	6.07	4.55	7.59	Siemens Immulite 2000/2500
	ng/ml	3.95	2.96	4.94	
	ng/dl	395	296	494	
	nmol/l	6.86	5.15	8.58	Siemens Immulite 1000
	ng/ml	4.47	3.35	5.59	
	ng/dl	447	335	559	
	nmol/l	5.40	4.05	6.75	Beckman Dxl800
	ng/ml	3.52	2.64	4.40	
	ng/dl	352	264	440	
	nmol/l	6.14	4.61	7.68	Roche Elecsys
	ng/ml	4.00	3.00	5.00	
ng/dl	400	300	500		

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods
			low	high	
Total T3	nmol/l	5.39	4.04	6.74	Beckman Access
	ng/ml	3.51	2.63	4.39	
	ng/dl	351	263	439	
	nmol/l	5.54	4.16	6.93	Tosoh Series
	ng/ml	3.61	2.71	4.51	
	ng/dl	361	271	451	
	nmol/l	6.81	5.11	8.51	Vitros ECI
	ng/ml	4.43	3.33	5.53	
	ng/dl	443	333	553	
	nmol/l	4.96	3.72	6.20	CIS RIA Coated tube
	ng/ml	3.23	2.42	4.04	
	ng/dl	323	242	404	
	nmol/l	6.49	4.87	8.11	Roche Cobas 4000/E411
	ng/ml	4.22	3.17	5.27	
	ng/dl	422	317	527	
	nmol/l	6.20	4.65	7.75	Roche Cobas e601/602
	ng/ml	4.04	3.03	5.05	
	ng/dl	404	303	505	
	nmol/l	6.06	4.55	7.58	ELISA
	ng/ml	3.95	2.96	4.94	
	ng/dl	395	296	494	
	nmol/l	7.19	5.39	8.99	Siemens Centaur CP
	ng/ml	4.68	3.51	5.85	
	ng/dl	468	351	585	
nmol/l	3.44	2.58	4.30	Boditech Med Inc i-CHROMA	
ng/ml	2.24	1.68	2.80		
ng/dl	224	168	280		
nmol/l	5.05	3.79	6.31	Diasorin Liaison XL	
ng/ml	3.29	2.47	4.11		
ng/dl	329	247	411		
nmol/l	5.02	3.77	6.28	Abbott Alinity i	
ng/ml	3.27	2.45	4.09		
ng/dl	327	245	409		
nmol/l	6.40	4.80	8.00	Siemens Atellica IM	
ng/ml	4.17	3.12	5.22		
ng/dl	417	312	522		
nmol/l	6.33	4.75	7.91	Roche Cobas e801	
ng/ml	4.12	3.09	5.15		
ng/dl	412	309	515		
Total T4	nmol/l	165	124	206	Abbott Architect
	µg/dl	12.9	9.67	16.1	
	ng/ml	129	96.7	161	
	nmol/l	198	149	248	BioMerieux Vidas
	µg/dl	15.4	11.6	19.2	
	ng/ml	154	116	192	
	nmol/l	174	122	226	Siemens Centaur XP/XPT/Classic
	µg/dl	13.6	9.52	17.7	
	ng/ml	136	95.2	177	

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods
			low	high	
Total T4	nmol/l	191	143	239	Siemens Immulite 2000/2500
	µg/dl	14.9	11.2	18.6	
	ng/ml	149	112	186	
	nmol/l	188	141	235	Siemens Immulite 1000
	µg/dl	14.7	11.0	18.4	
	ng/ml	147	110	184	
	nmol/l	183	137	229	Beckman Dxl800
	µg/dl	14.3	10.7	17.9	
	ng/ml	143	107	179	
	nmol/l	170	128	213	Roche Elecsys
	µg/dl	13.3	9.98	16.6	
	ng/ml	133	100	166	
	nmol/l	187	140	234	Beckman Access
	µg/dl	14.6	10.9	18.3	
	ng/ml	146	109	183	
	nmol/l	165	124	206	Tosoh Series
	µg/dl	12.9	9.67	16.1	
	ng/ml	129	96.7	161	
	nmol/l	197	148	246	Vitros ECi
	µg/dl	15.4	11.5	19.3	
	ng/ml	154	115	193	
	nmol/l	187	140	234	CIS RIA Coated tube
	µg/dl	14.6	10.9	18.3	
	ng/ml	146	109	183	
nmol/l	177	133	221	Roche Cobas 4000/E411	
µg/dl	13.8	10.4	17.2		
ng/ml	138	104	172		
nmol/l	169	127	211	Roche Cobas e601/602	
µg/dl	13.2	9.91	16.5		
ng/ml	132	99.1	165		
nmol/l	129	96.8	161	Immunotech IRMA	
µg/dl	10.1	7.55	12.7		
ng/ml	101	75.5	127		
nmol/l	161	121	201	ELISA	
µg/dl	12.6	9.44	15.8		
ng/ml	126	94.4	158		
nmol/l	194	146	243	Boditech Med Inc i-CHROMA	
µg/dl	15.1	11.4	18.8		
ng/ml	151	114	188		
nmol/l	199	139	259	Siemens Centaur CP	
µg/dl	15.5	10.9	20.1		
ng/ml	155	109	201		
nmol/l	139	104	174	Diasorin Liaison XL	
µg/dl	10.8	8.11	13.5		
ng/ml	108	81.1	135		

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods	
			low	high		
Total T4	nmol/l	165	124	206	Abbott Alinity i	
	µg/dl	12.9	9.67	16.1		
	ng/ml	129	96.7	161		
	nmol/l	177	133	221	Siemens Atellica IM	
		µg/dl	13.8	10.4		17.2
		ng/ml	138	104		172
	nmol/l	158	119	198	Roche Cobas e801	
		µg/dl	12.3	9.28		15.3
		ng/ml	123	92.8		153
Valproic Acid	µmol/l	932	746	1118	Abbott Architect (CMIA)	
	µg/ml	134	108	160		
	µmol/l	1023	818	1228	Siemens Centaur XP/XPT/Classic	
		µg/ml	148	118		178
	µmol/l	909	727	1091	Siemens Dimension	
		µg/ml	131	105		157
	µmol/l	976	781	1171	Siemens Immulite 2000/2500	
		µg/ml	141	113		169
	µmol/l	960	768	1152	Siemens Immulite 1000	
		µg/ml	139	111		167
	µmol/l	925	740	1110	Roche Integra	
		µg/ml	133	107		159
	µmol/l	969	775	1163	Roche Cobas 4000/c311	
		µg/ml	140	112		168
	µmol/l	934	747	1121	Roche Cobas 6000/8000	
		µg/ml	135	108		162
	µmol/l	977	782	1172	Beckman AU400/600/640/2700/5400	
		µg/ml	141	113		169
	µmol/l	925	740	1110	Siemens ADVIA 1200/1650/1800/2400	
		µg/ml	133	107		159
	µmol/l	930	744	1116	Abbott Architect (PETINA)	
		µg/ml	134	107		161
	µmol/l	965	772	1158	EMIT	
		µg/ml	139	111		167
	µmol/l	955	764	1146	Siemens Atellica CH	
		µg/ml	138	110		166
	µmol/l	936	749	1123	Abbott Alinity (PETINA)	
µg/ml		135	108	162		
µmol/l	1116	893	1339	Gravimetric		
	µg/ml	161	129		193	
Vancomycin	µmol/l	9.30	7.44	11.2	Roche Integra	
	µg/ml	13.8	11.1	16.5		
	µmol/l	8.70	6.96	10.4	Ortho Vitros Microslide Systems	
		µg/ml	12.9	10.3		15.5
	µmol/l	11.6	9.28	13.9	Abbott Architect (CMIA)	
		µg/ml	17.2	13.8		20.6

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

Cat. No. IA3111 / IA3112 Lot No. 2028EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2023-11-28

Analyte	unit	Target	Range		methods
			low	high	
Vancomycin	µmol/l	8.76	7.01	10.5	Siemens Centaur XP/XPT/Classic
	µg/ml	13.0	10.4	15.6	
	µmol/l	10.2	8.16	12.2	Siemens Dimension
	µg/ml	15.2	12.1	18.3	
	µmol/l	9.89	7.91	11.9	Roche Cobas 6000/8000
	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	10.1	8.08	12.1	Siemens Atellica CH
	µg/ml	15.0	12.0	18.0	
	µmol/l	9.70	7.76	11.6	Abbott Alinity (PETINA)
	µg/ml	14.4	11.5	17.3	
	µmol/l	10.8	8.64	13.0	Gravimetric
	µg/ml	16.0	12.8	19.3	
Vitamin B12	pmol/l	634	507	761	Abbott Architect
	pg/ml	859	687	1031	
	pmol/l	741	556	926	Siemens Centaur XP/XPT/Classic
	pg/ml	1004	753	1255	
	pmol/l	643	514	772	Siemens Immulite 2000
	pg/ml	871	696	1046	
	pmol/l	587	470	704	Beckman Dxl800
	pg/ml	795	637	953	
	pmol/l	677	542	812	Roche Elecsys
	pg/ml	917	734	1100	
	pmol/l	581	465	697	Beckman Access
	pg/ml	787	630	944	
	pmol/l	805	644	966	Tosoh Series
	pg/ml	1091	873	1309	
	pmol/l	655	524	786	Vitros ECi
	pg/ml	888	710	1066	
	pmol/l	634	507	761	Siemens Dimension
	pg/ml	859	687	1031	
	pmol/l	765	574	956	Siemens Centaur CP
	pg/ml	1037	778	1296	
	pmol/l	694	555	833	Roche Cobas 4000/e411 Gen II
	pg/ml	940	752	1128	
	pmol/l	719	575	863	Roche Cobas e601/602 Gen II
	pg/ml	974	779	1169	
	pmol/l	816	653	979	Siemens Atellica IM
	pg/ml	1106	885	1327	
	pmol/l	538	430	646	Abbott Alinity i
	pg/ml	729	583	875	
pmol/l	717	574	860	Roche Cobas e801 Gen II	
pg/ml	972	778	1166		

**ADDITIONAL VALUES FOR
IMMUNOASSAY PREMIUM PLUS - LEVEL 3
(IA PREMIUM PLUS 3)
Cat No. IA3111 / IA3112
Lot No. 2028EC**

COMPONENT	UNITS	TARGET	RANGE	METHOD
C-Pepide	nmol/l	3.17	2.33 - 4.01	Ortho Vitros ECi
	ng/ml	9.58	7.02 – 12.1	
Insulin	mU/l	24.0	15.2 – 32.8	Ortho Vitros ECi
	μU/ml	24.0	15.2 – 32.8	

EC REP

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

14 Apr 21 bm

**ADDITIONAL VALUES FOR
 IMMUNOASSAY PREMIUM PLUS - LEVEL 3
 (IA PREMIUM PLUS 3)
 Cat No. IA3111 / IA3112
 Lot No. 2028EC
 GTIN: 05055273207279 / 05055273207286**

COMPONENT	UNITS	TARGET	RANGE	METHOD
Carbamazepine	µmol/l	54.0	43.2 – 64.8	Abbott Alinity (PETINA)
	µg/ml	12.8	10.2 – 15.4	

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

04 Oct '21 me

**ADDITIONAL VALUES FOR
 IMMUNOASSAY PREMIUM PLUS - LEVEL 3
 (IA PREMIUM PLUS 3)
 Cat No. IA3111 / IA3112
 Lot No. 2028EC
 GTIN: 05055273207279 / 05055273207286**

COMPONENT	UNITS	TARGET	RANGE	METHOD
DHEA - S	µmol/l	20.7	16.6 – 24.8	Abbott Alinity i

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

05 Aug '21 me

**ADDITIONAL VALUES FOR
IMMUNOASSAY PREMIUM PLUS – LEVEL 3
(IA PREMIUM PLUS 3)
Cat No. IA3111/IA3112
Lot No. 2028EC
GTIN: 05055273207279 / 05055273207286**

Analyte	Unit	Target	Low	High	Method
17-OH Progesterone	nmol/l	37.2	26.0	48.3	Snibe Maglumi
	ng/ml	12.3	8.61	16.0	
Alpha-fetoprotein	KIU/l = IU/ml	193	135	251	Snibe Maglumi
	ng/ml	234	163	304	
Androstenedione	nmol/l	24.8	17.4	32.3	Snibe Maglumi
	ng/ml	7.12	4.98	9.26	
Beta-2-microglobulin	µg/ml = mg/l	5.44	3.81	7.07	Snibe Maglumi
C-Peptide	nmol/l	3.91	2.74	5.07	Snibe Maglumi
	ng/ml	11.8	8.26	15.3	
CA 19-9	U/ml	43.3	30.3	56.3	Snibe Maglumi
CA125	U/ml	88.7	62.1	115	Snibe Maglumi
Carcinoembryonic Antigen (CEA)	ng/ml = µg/l	51.2	35.8	66.6	Snibe Maglumi
Cortisol	nmol/l	10139	7111	13194	Snibe Maglumi
	µg/dl	365	256	475	
Digoxin	nmol/l	4.85	3.39	6.31	Snibe Maglumi
	ng/ml	3.79	2.65	4.93	
Ferritin	ng/ml = µg/l	415	291	540	Snibe Maglumi
Free T3	pmol/l	33.2	23.2	43.2	Snibe Maglumi
	ng/dl	2.16	1.51	2.81	
	pg/ml	21.6	15.1	28.1	
Free T4	pmol/l	67.7	47.4	87.9	Snibe Maglumi
	ng/dl	5.28	3.70	6.86	
	pg/ml	52.8	37.0	68.6	
FSH	mU/ml	66.4	46.5	86.3	Snibe Maglumi
Immunoglobulin E	KIU/l = IU/ml	524	367	681	Snibe Maglumi
Insulin	mU/l	28.1	19.7	36.5	Snibe Maglumi
	µU/ml	28.1	19.7	36.5	
Luteinising Hormone (LH)	mU/ml	72.5	50.8	94.3	Snibe Maglumi
Oestradiol	pmol/l	3268	2287	4250	Snibe Maglumi
	pg/ml	889	622	1156	
Progesterone	nmol/l	80.2	56.2	104	Snibe Maglumi
	ng/ml	25.1	17.6	32.6	
Prolactin	µU/ml	1083	758	1408	Snibe Maglumi
PSA Free	ng/ml = µg/l	14.8	10.4	19.2	Snibe Maglumi
PSA Total	ng/ml = µg/l	15.0	10.5	19.5	Snibe Maglumi

Analyte	Unit	Target	Low	High	Method
Testosterone	nmol/l	29.3	20.6	38.2	Snibe Maglumi
	ng/ml	8.45	5.92	11.0	
	ng/dl	243	170	317	
Thyroid Stimulating Hormone	$\mu\text{U/ml} = \text{mIU/l}$	14.0	9.80	18.2	Snibe Maglumi
Total T3	nmol/l	4.85	3.39	6.31	Snibe Maglumi
	ng/ml	3.16	2.21	4.11	
	ng/dl	316	221	411	
Total T4	nmol/l	187	131	244	Snibe Maglumi
	$\mu\text{g/dl}$	14.6	10.2	19.0	
	ng/ml	146	102	190	

EC REP

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

12 Aug '21 me

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

Cat. No. IA3111 / IA3112		Lot No. 2028EC		Size: 12 x 5ml / 4 x 5ml		Expiry: 2023-11-28	
Analyte	unit	Target	Range		methods		
			low	high			
Alpha-fetoprotein	ng/ml	222.62	162.51	282.73	Mindray CL-1000i,CL-1200i,CL-2000i,CL-6000i		
	ng/ml	224.64	163.99	285.30	Mindray CL-900i		
CA 15-3	U/ml	39.22	28.63	49.81	Mindray CL-1000i,CL-1200i,CL-2000i,CL-6000i		
	U/ml	38.68	28.23	49.12	Mindray CL-900i		
CA 19-9	U/ml	110.29	80.51	140.07	Mindray CL-1000i,CL-1200i,CL-2000i,CL-6000i		
	U/ml	117.46	85.75	149.17	Mindray CL-900i		
CA125	U/ml	60.46	44.13	76.78	Mindray CL-1000i,CL-1200i,CL-2000i,CL-6000i		
	U/ml	61.20	44.68	77.73	Mindray CL-900i		
Carcinoembryonic Antigen (CEA)	ng/ml = µg/l	43.47	31.73	55.21	Mindray CL-1000i,CL-1200i,CL-2000i,CL-6000i		
	ng/ml = µg/l	43.66	31.88	55.45	Mindray CL-900i		
Cortisol	µg/dL	31.15	21.81	40.50	Mindray CL-1000i,CL-1200i,CL-2000i,CL-6000i		
	µg/dL	30.36	21.25	39.46	Mindray CL-900i		
DHEA-S	µg/dl	797.25	542.13	1052.38	Mindray CL-1000i,CL-1200i,CL-2000i,CL-6000i		
	µg/dl	789.84	537.09	1042.59	Mindray CL-900i		
E2	pg/ml	491.29	358.64	623.94	Mindray CL-1000i,CL-1200i,CL-2000i,CL-6000i		
	pg/ml	474.43	346.33	602.53	Mindray CL-900i		
E3	ng/ml	4.39	3.20	5.57	Mindray CL-1000i,CL-1200i,CL-2000i,CL-6000i		
	ng/ml	4.06	2.96	5.15	Mindray CL-900i		
Ferritin	ng/ml = µg/l	338.32	236.83	439.82	Mindray CL-1000i,CL-1200i,CL-2000i,CL-6000i		
	ng/ml = µg/l	345.60	241.92	449.28	Mindray CL-900i		
Folate	ng/ml	25.03	17.02	33.05	Mindray CL-1000i,CL-1200i,CL-2000i,CL-6000i		
	ng/ml	24.11	16.39	31.82	Mindray CL-900i		
Insulin	µIU/ml	28.07	19.09	37.06	Mindray CL-1000i,CL-1200i,CL-2000i,CL-6000i		
	µIU/ml	31.65	21.52	41.77	Mindray CL-900i		
LH	mIU/ml	59.66	43.55	75.77	Mindray CL-1000i,CL-1200i,CL-2000i,CL-6000i		
	mIU/ml	61.88	45.17	78.59	Mindray CL-900i		
Progesterone	ng/ml	43.28	29.43	57.13	Mindray CL-1000i,CL-1200i,CL-2000i,CL-6000i		
	ng/ml	42.13	28.65	55.61	Mindray CL-900i		
Prolactin	ng/ml	58.57	42.75	74.38	Mindray CL-1000i,CL-1200i,CL-2000i,CL-6000i		
	ng/ml	60.10	43.87	76.33	Mindray CL-900i		
PSA Free	ng/ml = µg/l	15.23	11.12	19.34	Mindray CL-1000i,CL-1200i,CL-2000i,CL-6000i		
	ng/ml = µg/l	15.47	11.29	19.65	Mindray CL-900i		
PSA Total	ng/ml = µg/l	19.21	13.06	25.35	Mindray CL-1000i,CL-1200i,CL-2000i,CL-6000i		
	ng/ml = µg/l	19.20	13.05	25.34	Mindray CL-900i		
Testosterone	ng/ml	11.82	8.62	15.01	Mindray CL-1000i,CL-1200i,CL-2000i,CL-6000i		
	ng/ml	11.97	8.74	15.20	Mindray CL-900i		
Tg	ng/ml	17.02	11.58	22.47	Mindray CL-1000i,CL-1200i,CL-2000i,CL-6000i		
	ng/ml	16.97	11.54	22.41	Mindray CL-900i		
Total Beta hCG	mIU/ml=IU/l	201.04	146.76	255.33	Mindray CL-1000i,CL-1200i,CL-2000i,CL-6000i		
	mIU/ml=IU/l	204.31	149.14	259.47	Mindray CL-900i		
VB12	pg/mL	1293.39	944.17	1642.60	Mindray CL-1000i,CL-1200i,CL-2000i,CL-6000i		
	pg/mL	1356.79	990.46	1723.12	Mindray CL-900i		