

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

<b>CAT. NO.</b> IA3111	<b>GTIN:</b> 05055273207279	<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> 218IEC	<b>EXPIRY:</b> 2025-06-28	

### 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 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

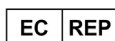
### MATERIAL REQUIRED BUT NOT PROVIDED

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. 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).



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

Rev. 24 Apr '23 me

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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
17-OH-Progesterone	nmol/l	46.7	35.0	58.4	DRG ELISA
	ng/ml	15.5	11.6	19.4	
	nmol/l	28.8	21.6	36.0	DIAsource RIA
	ng/ml	9.53	7.15	11.9	
25-OH Vitamin D	nmol/l	91.0	68.3	114	Diasorin Liaison
	nmol/l	126	94.5	158	Siemens Centaur XP/XPT/Classic
	nmol/l	79.5	59.6	99.0	Roche Vitamin D Total
	nmol/l	91.2	68.4	114	Abbott Architect (3L52)
	nmol/l	106	79.5	133	Vitros ECI
	nmol/l	82.3	61.7	103	Tosoh Series
	nmol/l	86.8	65.1	109	BioMerieux Vidas
	nmol/l	82.4	61.8	103	Beckman Dxl 600/800
	nmol/l	108	81.0	135	Fujirebio Lumipulse G Series
	nmol/l	83.3	62.5	104	Beckman Access 25 OH Vitamin D Total
	nmol/l	89.5	67.1	112	Abbott Architect (5P02)/ Alinity (8P45)
	nmol/l	100	75.0	125	Diasorin Liaison XL
	nmol/l	85.8	64.4	107	Roche Vitamin D Total II
	nmol/l	92.0	69.0	115	Abbott Alinity i
	nmol/l	121	90.8	151	Siemens Atellica IM
nmol/l	82.4	61.8	103	Roche Vitamin D Total II e801	
nmol/l	77.7	58.3	97.1	Roche Vitamin D Total III	
ACTH	pmol/l	49.9	37.4	62.4	Siemens Immulite 2000/2500
	pg/ml	227	170	284	
	pmol/l	59.5	44.6	74.4	Diasorin Liaison XL
	pg/ml	270	203	337	
	pmol/l	33.3	25.0	41.6	Roche Cobas e402/e801
	pg/ml	151	114	188	
Aldosterone	pmol/l	49.8	37.4	62.3	Tosoh AIA-CL Series
	pg/ml	226	170	282	
	pmol/l	710	533	888	Immunotech RIA
	pg/ml	256	192	320	
	pmol/l	451	338	564	IDS iSYS
	pg/ml	163	122	204	
Alphafoetoprotein	pmol/l	411	308	514	Diasorin Liaison
	pg/ml	148	111	185	
	pmol/l	464	348	580	Diasorin Liaison XL
	pg/ml	167	126	208	
	KIU/l = IU/ml	160	128	192	Abbott Architect
	ng/ml	194	155	233	
Alphafoetoprotein	KIU/l = IU/ml	164	131	197	BioMerieux Vidas
	ng/ml	198	159	237	
	KIU/l = IU/ml	183	146	220	Siemens Centaur XP/XPT/Classic
	ng/ml	221	177	265	

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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
Alphafoetoprotein	KIU/l = IU/ml	157	126	188	Siemens Immulite 2000/2500
	ng/ml	190	152	228	
	KIU/l = IU/ml	149	119	179	Beckman Dxl800
	ng/ml	180	144	216	
	KIU/l = IU/ml	177	142	212	Roche Elecsys
	ng/ml	214	172	256	
	KIU/l = IU/ml	199	159	239	Diasorin Liaison
	ng/ml	241	192	290	
	KIU/l = IU/ml	155	124	186	Beckman Access
	ng/ml	188	150	226	
	KIU/l = IU/ml	148	118	178	Tosoh Series
	ng/ml	179	143	215	
	KIU/l = IU/ml	162	130	194	Vitros Eci
	ng/ml	168	134	202	
	KIU/l = IU/ml	180	144	216	Roche Cobas e601/602
	ng/ml	218	174	262	
	KIU/l = IU/ml	183	146	220	Roche Cobas 4000/E411
	ng/ml	221	177	265	
	KIU/l = IU/ml	165	132	198	Fujirebio Lumipulse G Series
	ng/ml	200	160	240	
KIU/l = IU/ml	182	146	218	Siemens Centaur CP	
ng/ml	220	177	263		
KIU/l = IU/ml	182	146	218	Immunotech IRMA	
ng/ml	220	177	263		
KIU/l = IU/ml	168	134	202	Sysmex HISCL Series	
ng/ml	203	162	244		
KIU/l = IU/ml	171	137	205	Mindray CL Series	
ng/ml	207	166	248		
KIU/l = IU/ml	189	151	227	Diasorin Liaison XL	
ng/ml	229	183	275		
KIU/l = IU/ml	182	146	218	Siemens Atellica IM	
ng/ml	220	177	263		
KIU/l = IU/ml	160	128	192	Abbott Alinity i	
ng/ml	194	155	233		
KIU/l = IU/ml	170	136	204	Roche Cobas e402/e801	
ng/ml	206	165	247		
KIU/l = IU/ml	145	116	174	Tosoh AIA-CL Series	
ng/ml	175	140	210		
Amikacin	µmol/l	22.3	17.8	26.8	EMIT
	µg/ml	13.1	10.4	15.8	
	µmol/l	23.2	18.6	27.8	Roche Cobas 6000/8000
	µg/ml	13.6	10.9	16.3	
	µmol/l	24.3	19.4	29.2	Abbott Architect
	µg/ml	14.2	11.4	17.0	
µmol/l	23.6	18.9	28.3	Thermo Scientific QMS Amikacin	
µg/ml	13.8	11.1	16.5		

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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
Amikacin	µmol/l	24.4	19.5	29.3	Abbott Alinity
	µg/ml	14.3	11.4	17.2	
	µmol/l	24.1	19.3	28.9	Gravimetric
	µg/ml	14.1	11.3	16.9	
Androstenedione	nmol/l	30.0	22.5	37.5	Siemens Immulite 2000
	ng/ml	8.61	6.46	10.8	
	nmol/l	17.4	13.1	21.8	DRG ELISA
	ng/ml	4.99	3.76	6.22	
Beta-2-microglobulin	nmol/l	17.5	13.1	21.9	Diasorin Liaison XL
	ng/ml	5.02	3.76	6.28	
	µg/ml = mg/l	6.04	4.83	7.25	Abbott Architect
	µg/ml = mg/l	6.69	5.35	8.03	BioMerieux Vidas
C-Peptide	µg/ml = mg/l	5.92	4.74	7.10	Behring Nephelometer
	µg/ml = mg/l	5.22	4.18	6.26	Siemens Immulite 2000/2500
	µg/ml = mg/l	5.51	4.41	6.61	Siemens Immulite 1000
	µg/ml = mg/l	5.82	4.66	6.98	Roche Cobas 6000/8000
	µg/ml = mg/l	5.93	4.74	7.12	Diasorin Liaison XL
	µg/ml = mg/l	6.64	5.31	7.97	Siemens Atellica CH
	µg/ml = mg/l	6.10	4.88	7.32	Abbott Alinity
	nmol/l	2.900	2.180	3.630	Siemens Immulite 2000/2500
	ng/ml	8.76	6.58	10.9	
	nmol/l	3.000	2.250	3.750	Roche Elecsys
ng/ml	9.06	6.79	11.3		
nmol/l	2.960	2.220	3.700	Roche Cobas e601/602	
ng/ml	8.94	6.70	11.2		
nmol/l	3.050	2.290	3.810	Diasorin Liaison	
ng/ml	9.21	6.91	11.5		
nmol/l	2.990	2.240	3.740	Roche Cobas 4000/E411	
ng/ml	9.03	6.76	11.3		
nmol/l	2.820	2.120	3.530	Abbott Architect	
ng/ml	8.51	6.40	10.6		
nmol/l	2.160	1.620	2.700	Siemens Centaur XP/XPT/Classic	
ng/ml	6.52	4.89	8.15		
nmol/l	2.730	2.050	3.410	Tosoh Series	
ng/ml	8.24	6.19	10.3		
nmol/l	3.270	2.450	4.090	Diasorin Liaison XL	
ng/ml	9.87	7.40	12.3		
nmol/l	2.860	2.150	3.580	Roche Cobas e402/e801	
ng/ml	8.63	6.49	10.8		
nmol/l	1.950	1.460	2.440	Siemens Atellica IM	
ng/ml	5.89	4.41	7.37		
nmol/l	2.860	2.150	3.580	Vitros ECI	
ng/ml	8.63	6.49	10.8		
nmol/l	3.000	2.250	3.750	Tosoh AIA-CL Series	
ng/ml	9.06	6.79	11.3		

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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
C-Peptide	nmol/l	2.730	2.050	3.410	Abbott Alinity i
	ng/ml	8.24	6.19	10.3	
CA 15-3	U/ml	78.1	62.5	93.7	Abbott Architect
	U/ml	68.1	54.5	81.7	BioMerieux Vidas
	U/ml	69.7	55.8	83.6	Siemens Centaur XP/XPT/Classic
	U/ml	67.8	54.2	81.4	Siemens Immulite 2000/2500
	U/ml	32.4	25.9	38.9	Beckman Dxl800
	U/ml	76.7	61.4	92.0	Roche Elecsys
	U/ml	31.9	25.5	38.3	Beckman Access
	U/ml	75.8	60.6	91.0	Tosoh Series
	U/ml	64.2	51.4	77.0	Vitros ECi
	U/ml	78.4	62.7	94.1	Roche Cobas e601/602
	U/ml	78.6	62.9	94.3	Immunotech IRMA
	U/ml	77.9	62.3	93.5	Roche Cobas 4000/E411
	U/ml	85.3	68.2	102	Fujirebio Lumipulse G Series
	U/ml	68.3	54.6	82.0	Siemens Centaur CP
	U/ml	35.7	28.6	42.8	Mindray CL 8000i / 6000i / 2000i / 1200i / 1000i
	U/ml	73.2	58.6	87.8	Diasorin Liaison XL
	U/ml	72.1	57.7	86.5	Siemens Atellica IM
	U/ml	74.3	59.4	89.2	Roche Cobas e402/e801
U/ml	76.4	61.1	91.7	Abbott Alinity i	
CA 19-9	U/ml	289	231	347	BioMerieux Vidas
	U/ml	351	281	421	Siemens Centaur XP/XPT/Classic
	U/ml	359	287	431	Siemens Immulite 2000/2500
	U/ml	357	286	428	Beckman Dxl800
	U/ml	165	132	198	Roche Elecsys
	U/ml	335	268	402	Diasorin Liaison
	U/ml	396	317	475	Beckman Access
	U/ml	124	99.0	149	Tosoh Series
	U/ml	346	277	415	Vitros ECi
	U/ml	541	433	649	Abbott Architect XR/XR2/XRL
	U/ml	165	132	198	Roche Cobas e601/602
	U/ml	168	134	202	Roche Cobas 4000/E411
	U/ml	345	276	414	Fujirebio Lumipulse G Series
	U/ml	194	155	233	Izotop RIA
	U/ml	262	210	314	Siemens Centaur CP
	U/ml	76.1	60.9	91.3	Immunotech IRMA
	U/ml	158	126	190	Mindray CL 8000i / 6000i / 2000i / 1200i / 1000i
	U/ml	322	258	386	Diasorin Liaison XL
U/ml	372	298	446	Siemens Atellica IM	
U/ml	164	131	197	Roche Cobas e402/e801	
U/ml	548	438	658	Abbott Alinity XR/XR2/XRL	
CA125	U/ml	240	192	288	Abbott Architect
	U/ml	191	153	229	BioMerieux Vidas
	U/ml	194	155	233	Siemens Centaur XP/XPT/Classic OV Kit
	U/ml	199	159	239	Siemens Centaur XP/XPT/Classic CA125 II kit

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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
CA125	U/ml	163	130	196	Siemens Immulite 2000/2500
	U/ml	186	149	223	Siemens Immulite 1000
	U/ml	155	124	186	Beckman Dxl800
	U/ml	176	141	211	Roche Elecsys
	U/ml	155	124	186	Beckman Access
	U/ml	338	270	406	Tosoh Series
	U/ml	179	143	215	Vitros Eci
	U/ml	182	146	218	Roche Cobas 4000/E411
	U/ml	182	146	218	Roche Cobas e601/602
	U/ml	94.5	75.6	113	Immunotech IRMA
	U/ml	155	124	186	Fujirebio Lumipulse G Series
	U/ml	194	155	233	Siemens Centaur CP CA125 II kit
	U/ml	289	231	347	Mindray CL 8000i / 6000i / 2000i / 1200i / 1000i
	U/ml	233	186	280	Diasorin Liaison XL
	U/ml	215	172	258	Siemens Atellica IM
	U/ml	169	135	203	Roche Cobas e402/e801
U/ml	245	196	294	Abbott Alinity i	
Carbamazepine	µmol/l	70.0	56.0	84.0	Abbott Architect (CMIA)
	µg/ml	16.5	13.2	19.8	
	µmol/l	71.7	57.4	86.0	Siemens Centaur XP/XPT/Classic
	µg/ml	16.9	13.6	20.2	
	µmol/l	66.2	53.0	79.4	Siemens Dimension
	µg/ml	15.6	12.5	18.7	
	µmol/l	58.8	47.0	70.6	Siemens Immulite 2000/2500
	µg/ml	13.9	11.1	16.7	
	µmol/l	75.3	60.2	90.4	Roche Integra
	µg/ml	17.8	14.2	21.4	
	µmol/l	70.3	56.2	84.4	Roche Cobas 6000/8000
	µg/ml	16.6	13.3	19.9	
	µmol/l	71.4	57.1	85.7	Beckman AU400/600/640/2700/5400
	µg/ml	16.9	13.5	20.3	
	µmol/l	52.2	41.8	62.6	Abbott Architect (PETINA)
	µg/ml	12.3	9.88	14.7	
	µmol/l	65.6	52.5	78.7	Siemens Atellica CH
	µg/ml	15.5	12.4	18.6	
	µmol/l	51.5	41.2	61.8	Abbott Alinity (PETINA)
	µg/ml	12.2	9.74	14.7	
µmol/l	72.2	57.8	86.6	Gravimetric	
µg/ml	17.1	13.7	20.5		
Carcinoembryonic Antigen (CEA)	ng/ml = µg/l	70.6	56.5	84.7	Abbott Architect
	ng/ml = µg/l	63.3	50.6	76.0	BioMerieux Vidas
	ng/ml = µg/l	59.1	47.3	70.9	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	86.8	69.4	104	Siemens Immulite 2000/2500
	ng/ml = µg/l	79.0	63.2	94.8	Siemens Immulite 1000
	ng/ml = µg/l	57.4	45.9	68.9	Beckman Dxl800
ng/ml = µg/l	48.9	39.1	58.7	Roche Elecsys	

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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
Carcinoembryonic Antigen (CEA)	ng/ml = µg/l	58.9	47.1	70.7	Beckman Access
	ng/ml = µg/l	78.6	62.9	94.3	Tosoh Series
	ng/ml = µg/l	63.2	50.6	75.8	Vitros ECI
	ng/ml = µg/l	50.0	40.0	60.0	Roche Cobas e601/602
	ng/ml = µg/l	58.1	46.5	69.7	Immunotech IRMA
	ng/ml = µg/l	50.1	40.1	60.1	Roche Cobas 4000/E411
	ng/ml = µg/l	83.8	67.0	101	Fujirebio Lumipulse G Series
	ng/ml = µg/l	77.2	61.8	92.6	Boditech Med Inc i-CHROMA
	ng/ml = µg/l	63.2	50.6	75.8	Siemens Centaur CP
	ng/ml = µg/l	62.7	50.2	75.2	Mindray CL 8000i / 6000i / 2000i / 1200i / 1000i
	ng/ml = µg/l	67.5	54.0	81.0	Diasorin Liaison XL
	ng/ml = µg/l	58.9	47.1	70.7	Siemens Atellica IM
	ng/ml = µg/l	50.8	40.6	61.0	Roche Cobas e402/e801
	ng/ml = µg/l	69.8	55.8	83.8	Abbott Alinity i
Cortisol	nmol/l	904	678	1130	Abbott Architect
	µg/dl	32.5	24.4	40.6	
	nmol/l	958	719	1198	BioMerieux Vidas
	µg/dl	34.5	25.9	43.1	
	nmol/l	1149	862	1436	Siemens Centaur XP/XPT/Classic
	µg/dl	41.4	31.0	51.8	
	nmol/l	899	674	1124	Siemens Immulite 2000/2500
	µg/dl	32.4	24.3	40.5	
	nmol/l	999	749	1249	Siemens Immulite 1000
	µg/dl	36.0	27.0	45.0	
	nmol/l	1033	775	1291	Beckman Dxl800
	µg/dl	37.2	27.9	46.5	
	nmol/l	975	731	1219	Roche Elecsys
	µg/dl	35.1	26.3	43.9	
	nmol/l	1119	839	1399	Beckman Access
	µg/dl	40.3	30.2	50.4	
	nmol/l	1070	803	1338	Tosoh Series
	µg/dl	38.5	28.9	48.1	
	nmol/l	922	692	1153	Vitros ECI
	µg/dl	33.2	24.9	41.5	
nmol/l	1005	754	1256	Roche Cobas e601/602	
µg/dl	36.2	27.1	45.3		
nmol/l	1051	788	1314	Roche Cobas 4000/E411	
µg/dl	37.8	28.4	47.2		
nmol/l	1034	776	1293	Immunotech RIA	
µg/dl	37.2	27.9	46.5		
nmol/l	1359	1019	1699	Siemens Centaur CP	
µg/dl	48.9	36.7	61.1		
nmol/l	1049	787	1311	Roche Cobas 4000/e411 Gen II	
µg/dl	37.8	28.3	47.3		
nmol/l	994	746	1243	Roche Cobas e601/602 Gen II	
µg/dl	35.8	26.9	44.7		

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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
Cortisol	nmol/l	1039	779	1299	Roche Elecsys Gen II
	µg/dl	37.4	28.0	46.8	
	nmol/l	1134	851	1418	Diasorin Liaison XL
	µg/dl	40.8	30.6	51.0	
	nmol/l	1217	913	1521	Siemens Atellica IM
	µg/dl	43.8	32.9	54.7	
	nmol/l	985	739	1231	Roche Cobas e402/e801
	µg/dl	35.5	26.6	44.4	
DHEA-S	nmol/l	1086	815	1358	Tosoh AIA-CL Series
	µg/dl	39.1	29.3	48.9	
	nmol/l	897	673	1121	Abbott Alinity i
	µg/dl	32.3	24.2	40.4	
	µmol/l	20.8	16.6	25.0	Abbott Architect
	µmol/l	18.0	14.4	21.6	Siemens Immulite 2000/2500
	µmol/l	18.8	15.0	22.6	Siemens Immulite 1000
	µmol/l	17.1	13.7	20.5	Beckman DxI800
	µmol/l	19.6	15.7	23.5	Beckman Access
	µmol/l	17.3	13.8	20.8	Siemens Centaur XP/XPT/Classic
	µmol/l	26.4	21.1	31.7	Roche Cobas 4000/E411
Digoxin	µmol/l	25.8	20.6	31.0	Roche Cobas e601/602
	µmol/l	17.3	13.8	20.8	Diasorin Liaison XL
	µmol/l	16.0	12.8	19.2	Siemens Atellica IM
	µmol/l	26.0	20.8	31.2	Roche Cobas e402/e801
	µmol/l	21.3	17.0	25.6	Abbott Alinity i
	nmol/l	4.05	3.24	4.86	Abbott Architect (CMIA)
	ng/ml	3.16	2.53	3.79	
	nmol/l	4.62	3.70	5.54	BioMerieux Vidas
	ng/ml	3.61	2.89	4.33	
	nmol/l	5.50	4.40	6.60	Siemens Centaur XP/XPT/Classic
	ng/ml	4.30	3.44	5.16	
	nmol/l	5.00	4.00	6.00	Siemens Dimension
	ng/ml	3.91	3.12	4.70	
	nmol/l	4.93	3.94	5.92	Beckman DxI800
	ng/ml	3.85	3.08	4.62	
	nmol/l	4.89	3.91	5.87	Roche Cobas e601/602
	ng/ml	3.82	3.05	4.59	
	nmol/l	5.22	4.18	6.26	Beckman AU400/600/640/2700/5400
	ng/ml	4.08	3.26	4.90	
	nmol/l	5.13	4.10	6.16	Roche Cobas 4000/E411
ng/ml	4.01	3.20	4.82		
nmol/l	4.69	3.75	5.63	Abbott Architect (PETINA)	
ng/ml	3.66	2.93	4.39		
nmol/l	4.72	3.78	5.66	Roche Cobas e402/e801	
ng/ml	3.69	2.95	4.43		
nmol/l	6.18	4.94	7.42	Siemens Atellica IM	
ng/ml	4.83	3.86	5.80		



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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
Digoxin	nmol/l	4.66	3.73	5.59	Siemens Atellica CH
	ng/ml	3.64	2.91	4.37	
	nmol/l	4.66	3.73	5.59	Abbott Alinity (CMIA)
	ng/ml	3.64	2.91	4.37	
	nmol/l	4.80	3.84	5.76	Abbott Alinity (PETINA)
	ng/ml	3.75	3.00	4.50	
Ethosuximide	nmol/l	5.12	4.10	6.14	Gravimetric
	ng/ml	4.00	3.20	4.80	
Ethosuximide	µmol/l	493	395	592	Gravimetric
	µg/ml	70.0	56.0	83.9	
Ferritin	ng/ml = µg/l	343	274	412	Abbott Architect
	ng/ml = µg/l	237	190	284	BioMerieux Vidas
	ng/ml = µg/l	243	194	292	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	292	234	350	Siemens Dimension
	ng/ml = µg/l	275	220	330	Siemens Immulite 2000/2500
	ng/ml = µg/l	226	181	271	Siemens Immulite 1000
	ng/ml = µg/l	217	174	260	Beckman Dxl800
	ng/ml = µg/l	325	260	390	Roche Elecsys/Cobas e411
	ng/ml = µg/l	334	267	401	Diasorin Liaison
	ng/ml = µg/l	318	254	382	Roche Modular E170 / Roche Cobas e601/602
	ng/ml = µg/l	221	177	265	Beckman Access
	ng/ml = µg/l	225	180	270	Tosoh Series
	ng/ml = µg/l	197	158	236	Vitros ECi
	ng/ml = µg/l	311	249	373	Roche Cobas 4000/c311
	ng/ml = µg/l	259	207	311	Beckman AU400/600/640/2700/5400
	ng/ml = µg/l	298	238	358	Roche Cobas c501/502/503/701/702
	ng/ml = µg/l	234	187	281	Siemens Centaur CP
	ng/ml = µg/l	323	258	388	Diasorin Liaison XL
ng/ml = µg/l	351	281	421	Abbott Alinity i	
ng/ml = µg/l	227	182	272	Siemens Atellica IM	
ng/ml = µg/l	313	250	376	Roche Cobas e402/e801	
Folate	nmol/l	17.0	12.9	21.1	Abbott Architect
	ng/ml	7.50	5.69	9.31	
	nmol/l	40.5	30.8	50.2	Siemens Centaur XP/XPT/Classic (enhanced kit)
	ng/ml	17.9	13.6	22.2	
	nmol/l	14.5	11.0	18.0	Siemens Immulite 2000
	ng/ml	6.39	4.85	7.93	
	nmol/l	19.9	15.1	24.7	Beckman Dxl 600 / 800 - A14208
	ng/ml	8.78	6.66	10.9	
	nmol/l	20.4	15.5	25.3	Beckman Access
	ng/ml	9.00	6.84	11.2	
	nmol/l	31.0	23.6	38.4	Tosoh Series
	ng/ml	13.7	10.4	17.0	
	nmol/l	12.8	9.73	15.9	Vitros ECi
	ng/ml	5.64	4.29	6.99	
nmol/l	11.0	8.36	13.6	Siemens Dimension	
ng/ml	4.85	3.69	6.01		

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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
Folate	nmol/l	20.3	15.4	25.2	Beckman Dxl 600 / 800 - A98032
	ng/ml	8.95	6.79	11.1	
	nmol/l	21.0	16.0	26.0	Roche Folate III - 04476433
	ng/ml	9.26	7.06	11.5	
	nmol/l	21.4	16.3	26.5	Roche Elecsys Folate
	ng/ml	9.44	7.19	11.7	
	nmol/l	21.2	16.1	26.3	Roche Folate III - 07559992
	ng/ml	9.35	7.10	11.6	
	nmol/l	35.8	27.2	44.4	Siemens Atellica IM
	ng/ml	15.8	12.0	19.6	
	nmol/l	18.4	14.0	22.8	Abbott Alinity i
	ng/ml	8.11	6.17	10.1	
	nmol/l	22.1	16.8	27.4	Roche Folate 07027290 e801
	ng/ml	9.75	7.41	12.1	
Free T3	pmol/l	24.8	18.6	31.0	Abbott Architect, 2 point calibration
	ng/dl	1.61	1.21	2.01	
	pg/ml	16.1	12.1	20.1	
	pmol/l	23.5	17.6	29.4	BioMerieux Vidas
	ng/dl	1.53	1.14	1.92	
	pg/ml	15.3	11.5	19.1	
	pmol/l	23.5	17.6	29.4	Siemens Centaur XP/XPT/Classic
	ng/dl	1.53	1.14	1.92	
	pg/ml	15.3	11.5	19.1	
	pmol/l	14.8	11.1	18.5	Siemens Immulite 2000/2500
	ng/dl	0.962	0.722	1.20	
	pg/ml	9.63	7.23	12.0	
	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	16.4	12.3	20.5	Beckman Dxl800
	ng/dl	1.07	0.800	1.34	
	pg/ml	10.7	8.01	13.4	
	pmol/l	28.3	21.2	35.4	Roche Elecsys
	ng/dl	1.84	1.38	2.30	
	pg/ml	18.4	13.8	23.0	
	pmol/l	32.7	24.5	40.9	Diasorin Liaison
	ng/dl	2.13	1.59	2.67	
	pg/ml	21.3	15.9	26.7	
pmol/l	18.1	13.6	22.6	Beckman Access	
ng/dl	1.18	0.884	1.48		
pg/ml	11.8	8.85	14.8		
pmol/l	36.8	27.6	46.0	Tosoh Series	
ng/dl	2.39	1.79	2.99		
pg/ml	24.0	18.0	30.0		
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		

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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
Free T3	pmol/l	28.5	21.4	35.6	Roche Cobas 4000/E411
	ng/dl	1.85	1.39	2.31	
	pg/ml	18.6	13.9	23.3	
	pmol/l	28.7	21.5	35.9	Roche Cobas e601/602
	ng/dl	1.87	1.40	2.34	
	pg/ml	18.7	14.0	23.4	
	pmol/l	27.3	20.5	34.1	Fujirebio Lumipulse G Series
	ng/dl	1.77	1.33	2.21	
	pg/ml	17.8	13.3	22.3	
	pmol/l	24.5	18.4	30.6	Siemens Centaur CP
	ng/dl	1.59	1.20	1.98	
	pg/ml	15.9	12.0	19.8	
	pmol/l	23.1	17.3	28.9	Mindray CL 8000i / 6000i / 2000i / 1200i / 1000i
	ng/dl	1.50	1.12	1.88	
	pg/ml	15.0	11.3	18.7	
	pmol/l	25.6	19.2	32.0	Sysmex HISCL Series
	ng/dl	1.66	1.25	2.07	
	pg/ml	16.7	12.5	20.9	
	pmol/l	34.3	25.7	42.9	Diasorin Liaison XL
	ng/dl	2.23	1.67	2.79	
	pg/ml	22.3	16.7	27.9	
	pmol/l	26.2	19.7	32.8	Siemens Atellica IM
	ng/dl	1.70	1.28	2.12	
	pg/ml	17.1	12.8	21.4	
pmol/l	25.3	19.0	31.6	Abbott Alinity, 2 point cal	
ng/dl	1.64	1.24	2.04		
pg/ml	16.5	12.4	20.6		
pmol/l	24.8	18.6	31.0	Abbott Architect, 6 point calibration	
ng/dl	1.61	1.21	2.01		
pg/ml	16.1	12.1	20.1		
pmol/l	28.2	21.2	35.3	Roche Cobas e402/e801	
ng/dl	1.83	1.38	2.28		
pg/ml	18.4	13.8	23.0		
pmol/l	27.4	20.6	34.3	Tosoh AIA-CL Series	
ng/dl	1.78	1.34	2.22		
pg/ml	17.8	13.4	22.2		
pmol/l	25.2	18.9	31.5	Abbott Alinity, 6 point cal	
ng/dl	1.64	1.23	2.05		
pg/ml	16.4	12.3	20.5		
Free T4	pmol/l	50.5	37.9	63.1	Abbott Architect
	ng/dl	3.94	2.96	4.92	
	pg/ml	39.4	29.6	49.2	
	pmol/l	51.5	38.6	64.4	Siemens Centaur XP/XPT/Classic
	ng/dl	4.02	3.01	5.03	
pg/ml	40.2	30.1	50.3		

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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
Free T4	pmol/l	73.2	54.9	91.5	Siemens Immulite 2000/2500
	ng/dl	5.71	4.28	7.14	
	pg/ml	57.1	42.8	71.4	
	pmol/l	73.5	55.1	91.9	Siemens Immulite 1000
	ng/dl	5.73	4.30	7.16	
	pg/ml	57.3	43.0	71.6	
	pmol/l	58.4	43.8	73.0	Beckman Dxl800
	ng/dl	4.56	3.42	5.70	
	pg/ml	45.6	34.2	57.0	
	pmol/l	71.2	53.4	89.0	Roche Elecsys
	ng/dl	5.55	4.17	6.93	
	pg/ml	55.5	41.7	69.3	
	pmol/l	100	75.0	125	Diasorin Liaison
	ng/dl	7.80	5.85	9.75	
	pg/ml	78.0	58.5	97.5	
	pmol/l	54.8	41.1	68.5	Beckman Access
	ng/dl	4.27	3.21	5.33	
	pg/ml	42.7	32.1	53.3	
	pmol/l	73.3	55.0	91.6	Tosoh Series
	ng/dl	5.72	4.29	7.15	
	pg/ml	57.2	42.9	71.5	
	pmol/l	89.8	67.4	112	Vitros ECi
	ng/dl	7.00	5.26	8.74	
	pg/ml	70.0	52.6	87.4	
	pmol/l	73.6	55.2	92.0	BioMerieux Vidas
	ng/dl	5.74	4.31	7.17	
	pg/ml	57.4	43.1	71.7	
	pmol/l	74.3	55.7	92.9	Roche Cobas e601/602
	ng/dl	5.80	4.34	7.26	
	pg/ml	58.0	43.4	72.6	
pmol/l	72.2	54.2	90.3	Roche Cobas 4000/E411	
ng/dl	5.63	4.23	7.03		
pg/ml	56.3	42.3	70.3		
pmol/l	76.9	57.7	96.1	Biomerieux Vidas FT4N Kit	
ng/dl	6.00	4.50	7.50		
pg/ml	60.0	45.0	75.0		
pmol/l	56.0	42.0	70.0	Immunotech RIA	
ng/dl	4.37	3.28	5.46		
pg/ml	43.7	32.8	54.6		
pmol/l	69.1	51.8	86.4	Fujirebio Lumipulse G Series	
ng/dl	5.39	4.04	6.74		
pg/ml	53.9	40.4	67.4		
pmol/l	84.7	63.5	106	Siemens Dimension Exl LOCI	
ng/dl	6.61	4.95	8.27		
pg/ml	66.1	49.5	82.7		

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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
Free T4	pmol/l	54.8	41.1	68.5	Siemens Centaur CP
	ng/dl	4.27	3.21	5.33	
	pg/ml	42.7	32.1	53.3	
	pmol/l	58.4	43.8	73.0	Mindray CL 8000i / 6000i / 2000i / 1200i / 1000i
	ng/dl	4.56	3.42	5.70	
	pg/ml	45.6	34.2	57.0	
	pmol/l	89.1	66.8	111	Sysmex HISCL Series
	ng/dl	6.95	5.21	8.69	
	pg/ml	69.5	52.1	86.9	
	pmol/l	115	86.3	144	Diasorin Liaison XL
	ng/dl	8.97	6.73	11.2	
	pg/ml	89.7	67.3	112	
	pmol/l	54.3	40.7	67.9	Siemens Atellica IM
	ng/dl	4.24	3.17	5.31	
	pg/ml	42.4	31.7	53.1	
	pmol/l	47.5	35.6	59.4	Abbott Alinity i
	ng/dl	3.71	2.78	4.64	
	pg/ml	37.1	27.8	46.4	
FSH	pmol/l	76.4	57.3	95.5	Roche Cobas e402/e801
	ng/dl	5.96	4.47	7.45	
	pg/ml	59.6	44.7	74.5	
	pmol/l	67.7	50.8	84.6	Tosoh AIA-CL Series
	ng/dl	5.28	3.96	6.60	
	pg/ml	52.8	39.6	66.0	
	mU/ml	53.8	43.0	64.6	Abbott Architect
	mU/ml	71.5	57.2	85.8	BioMerieux Vidas
	mU/ml	81.5	65.2	97.8	Siemens Centaur XP/XPT/Classic
	mU/ml	63.1	50.5	75.7	Siemens Immulite 2000/2500
	mU/ml	60.8	48.6	73.0	Siemens Immulite 1000
	mU/ml	66.6	53.3	79.9	Beckman Dxl800
	mU/ml	55.5	44.4	66.6	Roche/BM Elecsys
	mU/ml	64.8	51.8	77.8	Beckman Access
	mU/ml	65.9	52.7	79.1	Tosoh Series
	mU/ml	46.5	37.2	55.8	Vitros ECi
	mU/ml	58.9	47.1	70.7	Roche Cobas 4000/E411
	mU/ml	54.2	43.4	65.0	Roche Cobas e601/602
mU/ml	74.5	59.6	89.4	Siemens Centaur CP	
mU/ml	80.8	64.6	97.0	Mindray CL 8000i / 6000i / 2000i / 1200i / 1000i	
mU/ml	92.4	73.9	111	Diasorin Liaison XL	
mU/ml	79.9	63.9	95.9	Siemens Atellica IM	
mU/ml	54.0	43.2	64.8	Abbott Alinity i	
mU/ml	55.6	44.5	66.7	Roche Cobas e402/e801	
Gentamicin	µmol/l	9.48	7.58	11.4	Roche Integra
	µg/ml	4.53	3.62	5.44	
	µmol/l	13.4	10.7	16.1	Siemens Centaur XP/XPT/Classic
	µg/ml	6.41	5.11	7.71	

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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Range					
Analyte	unit	Target	low	high	methods
Gentamicin	µmol/l	11.9	9.52	14.3	Abbott Architect (CMIA)
	µg/ml	5.69	4.55	6.83	
	µmol/l	8.23	6.58	9.88	Roche Cobas 6000/8000 Online KIMS
	µg/ml	3.93	3.15	4.71	
	µmol/l	11.5	9.20	13.8	Siemens Atellica CH
	µg/ml	5.50	4.40	6.60	
	µmol/l	12.1	9.68	14.5	Abbott Alinity (PETINA)
	µg/ml	5.78	4.63	6.93	
	µmol/l	11.7	9.36	14.0	Gravimetric
	µg/ml	5.59	4.47	6.69	
Growth Hormone (GH)	µU/ml	40.2	32.2	48.2	Siemens Immulite 2000/2500
	ng/ml	13.4	10.7	16.1	
	µU/ml	37.4	29.9	44.9	Siemens Immulite 1000
	ng/ml	12.5	9.96	15.0	
	µU/ml	30.2	24.2	36.2	Beckman DxI800
	ng/ml	10.1	8.06	12.1	
	µU/ml	32.2	25.8	38.6	Beckman Access
	ng/ml	10.7	8.59	12.8	
	µU/ml	32.3	25.8	38.8	Diasorin Liaison
	ng/ml	10.8	8.59	13.0	
	µU/ml	40.3	32.2	48.4	Roche Cobas 4000/E411
	ng/ml	13.4	10.7	16.1	
	µU/ml	40.0	32.0	48.0	Roche Cobas e601/602
	ng/ml	13.3	10.7	15.9	
	µU/ml	32.7	26.2	39.2	Diasorin Liaison XL
	ng/ml	10.9	8.72	13.1	
µU/ml	40.7	32.6	48.8	Roche Cobas e402/e801	
ng/ml	13.6	10.9	16.3		
µU/ml	35.7	28.6	42.8	Tosoh AIA-CL Series	
ng/ml	11.9	9.52	14.3		
Immunoglobulin E	KIU/l = IU/ml	428	342	514	Abbott Architect
	KIU/l = IU/ml	448	358	538	BioMerieux Vidas
	KIU/l = IU/ml	483	386	580	Siemens Centaur XP/XPT/Classic
	KIU/l = IU/ml	465	372	558	Siemens Immulite 2000/2500
	KIU/l = IU/ml	562	450	674	Siemens Immulite 1000
	KIU/l = IU/ml	496	397	595	Roche Elecsys
	KIU/l = IU/ml	455	364	546	Pharmacia Unicap
	KIU/l = IU/ml	435	348	522	Tosoh Series
	KIU/l = IU/ml	493	394	592	Roche Cobas 4000/E411
	KIU/l = IU/ml	499	399	599	Roche Cobas e601/602
	KIU/l = IU/ml	480	384	576	Siemens Centaur CP
	KIU/l = IU/ml	497	398	596	Agappe Mispa i2
	KIU/l = IU/ml	498	398	598	Siemens Atellica IM
	KIU/l = IU/ml	481	385	577	Roche Cobas e402/e801
KIU/l = IU/ml	418	334	502	Abbott Alinity	
Insulin	mU/l	31.4	23.6	39.3	Siemens Centaur XP/XPT/Classic
	µU/ml	31.4	23.6	39.2	

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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
Insulin	mU/l	9.68	7.26	12.1	Siemens Immulite 1000
	µU/ml	9.68	7.26	12.1	
	mU/l	28.9	21.7	36.1	Roche Elecsys
	µU/ml	28.9	21.7	36.1	
	mU/l	29.9	22.4	37.4	Beckman Access
	µU/ml	29.9	22.4	37.4	
	mU/l	25.3	19.0	31.6	Abbott Architect
	µU/ml	25.3	19.0	31.6	
	mU/l	30.1	22.6	37.6	Tosoh Series
	µU/ml	30.1	22.6	37.6	
	mU/l	29.8	22.4	37.3	Roche Cobas 4000/E411
	µU/ml	29.8	22.4	37.2	
	mU/l	28.3	21.2	35.4	Beckman Dxl 600/800
	µU/ml	28.3	21.2	35.4	
	mU/l	28.8	21.6	36.0	Roche Cobas 6000/8000
	µU/ml	28.8	21.6	36.0	
	mU/l	29.2	21.9	36.5	Mindray CL Series
	µU/ml	29.2	21.9	36.5	
	mU/l	34.5	25.9	43.1	Diasorin Liaison XL
	µU/ml	34.5	25.9	43.1	
mU/l	31.2	23.4	39.0	Siemens Atellica IM	
µU/ml	31.2	23.4	39.0		
mU/l	23.5	17.6	29.4	Abbott Alinity i	
µU/ml	23.5	17.6	29.4		
mU/l	30.0	22.5	37.5	Tosoh AIA-CL Series	
µU/ml	30.0	22.5	37.5		
Luteinising Hormone (LH)	mU/ml	40.7	32.6	48.8	Abbott Architect
	mU/ml	49.3	39.4	59.2	BioMerieux Vidas
	mU/ml	48.5	38.8	58.2	Siemens Centaur XP/XPT/Classic
	mU/ml	72.6	58.1	87.1	Siemens Immulite 2000
	mU/ml	75.1	60.1	90.1	Siemens Immulite 1000
	mU/ml	40.6	32.5	48.7	Beckman Dxl800
	mU/ml	54.3	43.4	65.2	Roche Elecsys
	mU/ml	41.1	32.9	49.3	Beckman Access
	mU/ml	47.4	37.9	56.9	Tosoh Series
	mU/ml	61.2	49.0	73.4	Vitros ECi
	mU/ml	54.9	43.9	65.9	Roche Cobas 4000/E411
	mU/ml	53.6	42.9	64.3	Roche Cobas e601/602
	mU/ml	48.0	38.4	57.6	Siemens Centaur CP
	mU/ml	56.9	45.5	68.3	Mindray CL 8000i / 6000i / 2000i / 1200i / 1000i
	mU/ml	66.6	53.3	79.9	Diasorin Liaison XL
	mU/ml	49.5	39.6	59.4	Siemens Atellica IM
	mU/ml	41.3	33.0	49.6	Abbott Alinity i
mU/ml	54.1	43.3	64.9	Roche Cobas e402/e801	
Oestradiol	pmol/l	1267	1014	1520	Abbott Architect
	pg/ml	345	276	414	

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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
Oestradiol	pmol/l	2906	2325	3487	BioMerieux Vidas
	pg/ml	790	632	948	
	pmol/l	2460	1968	2952	Siemens Centaur XP/XPT/Classic
	pg/ml	669	535	803	
	pmol/l	2116	1693	2539	Siemens Immulite 2000/2500
	pg/ml	576	460	692	
	pmol/l	2061	1649	2473	Siemens Immulite 1000
	pg/ml	561	449	673	
	pmol/l	1379	1103	1655	Beckman Dxl800
	pg/ml	375	300	450	
	pmol/l	1421	1137	1705	Roche Elecsys (Estradiol II)
	pg/ml	387	309	465	
	pmol/l	1520	1216	1824	Beckman Access
	pg/ml	413	331	495	
	pmol/l	1800	1440	2160	Tosoh (E2)
	pg/ml	490	392	588	
	pmol/l	2619	2095	3143	Vitros ECI
	pg/ml	712	570	854	
	pmol/l	1480	1184	1776	Roche Cobas e601/602 (Estradiol II)
	pg/ml	403	322	484	
	pmol/l	1475	1180	1770	Roche Cobas 4000/E411 (Estradiol II)
	pg/ml	401	321	481	
	pmol/l	2437	1950	2924	Siemens Centaur XP/XPT/Classic Enhanced (eE2)
	pg/ml	663	530	796	
	pmol/l	1691	1353	2029	Tosoh (iE2-hsE2)
	pg/ml	460	368	552	
	pmol/l	2431	1945	2917	Siemens Centaur CP Enhanced (eE2)
	pg/ml	661	529	793	
	pmol/l	1491	1193	1789	Roche Cobas e601/602 (Estradiol III)
	pg/ml	406	324	488	
	pmol/l	1459	1167	1751	Roche Elecsys (Estradiol III)
	pg/ml	397	317	477	
pmol/l	1457	1166	1748	Roche Cobas 4000/E411 (Estradiol III)	
pg/ml	396	317	475		
pmol/l	2120	1696	2544	Mindray CL Series	
pg/ml	577	461	693		
pmol/l	1105	884	1326	Diasorin Liaison XL	
pg/ml	301	240	362		
pmol/l	1552	1242	1862	Beckman Access / Access 2 Sensitive B84493	
pg/ml	422	338	506		
pmol/l	1391	1113	1669	Beckman Dxl600/800 Sensitive B84493	
pg/ml	378	303	453		
pmol/l	2582	2066	3098	Siemens Atellica IM	
pg/ml	702	562	842		
pmol/l	1233	986	1480	Abbott Alinity i	
pg/ml	335	268	402		



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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
Oestradiol	pmol/l	1494	1195	1793	Roche Cobas e801 (Estradiol III)
	pg/ml	406	325	487	
	pmol/l	1697	1358	2036	Tosoh AIA-CL Series
	pg/ml	462	369	555	
Paracetamol	mmol/l	0.477	0.382	0.572	Roche Cobas c501/502/503/701/702
	mg/l	72.2	57.8	86.6	
	mmol/l	0.455	0.364	0.546	Beckman AU Instruments
	mg/l	68.8	55.1	82.5	
	mmol/l	0.497	0.398	0.596	Abbott Alinity
	mg/l	75.2	60.2	90.2	
	mmol/l	0.529	0.423	0.635	Gravimetric
	mg/l	80.0	64.0	96.0	
Phenobarbital	µmol/l	122	97.6	146	Abbott Architect (CMIA)
	µg/ml	28.3	22.6	34.0	
	µmol/l	111	88.8	133	Roche Cobas e601/602/801
	µg/ml	25.8	20.6	31.0	
	µmol/l	116	92.8	139	Beckman AU400/600/640/2700/5400
	µg/ml	26.9	21.5	32.3	
	µmol/l	163	130	196	Siemens Centaur XP/XPT/Classic
	µg/ml	37.8	30.2	45.4	
	µmol/l	117	93.6	140	Roche Integra
	µg/ml	27.1	21.7	32.5	
	µmol/l	117	93.6	140	Roche Cobas C303/501/502/503/701
	µg/ml	27.1	21.7	32.5	
	µmol/l	113	90.4	136	Abbott Architect (PETINA)
	µg/ml	26.2	21.0	31.4	
	µmol/l	123	98.4	148	Siemens Atellica CH
	µg/ml	28.5	22.8	34.2	
Phenytoin	µmol/l	110	88.0	132	Abbott Alinity (PETINA)
	µg/ml	25.5	20.4	30.6	
	µmol/l	121	96.8	145	Gravimetric
	µg/ml	28.1	22.5	33.6	
	µmol/l	94.8	75.8	114	Abbott Architect
	µg/ml	23.9	19.1	28.7	
	µmol/l	131	105	157	Siemens Centaur XP/XPT/Classic
	µg/ml	33.1	26.5	39.7	
	µmol/l	102	81.6	122	Siemens Dimension
	µg/ml	25.8	20.6	31.0	
	µmol/l	86.8	69.4	104	Siemens Immulite 2000/2500
	µg/ml	21.9	17.5	26.3	
	µmol/l	92.3	73.8	111	Roche Integra
	µg/ml	23.3	18.6	28.0	
µmol/l	93.5	74.8	112	Roche Cobas 6000/8000	
µg/ml	23.6	18.9	28.3		
µmol/l	97.8	78.2	117	Beckman AU Instruments	
µg/ml	24.7	19.7	29.7		

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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
Phenytoin	µmol/l	102	81.6	122	Siemens Atellica CH
	µg/ml	25.8	20.6	31.0	
	µmol/l	97.7	78.2	117	Abbott Alinity
	µg/ml	24.7	19.7	29.7	
Primidone	µmol/l	99.8	79.8	120	Gravimetric
	µg/ml	25.2	20.1	30.3	
Progesterone	µmol/l	32.7	26.2	39.2	Gravimetric
	µg/ml	7.14	5.72	8.56	
Progesterone	nmol/l	90.9	72.7	109	Abbott Architect
	ng/ml	28.5	22.8	34.2	
	nmol/l	138	110	166	BioMerieux Vidas
	ng/ml	43.2	34.4	52.0	
	nmol/l	72.1	57.7	86.5	Siemens Centaur XP/XPT/Classic
	ng/ml	22.6	18.1	27.1	
	nmol/l	75.9	60.7	91.1	Siemens Immulite 2000/2500
	ng/ml	23.8	19.0	28.6	
	nmol/l	85.3	68.2	102	Siemens Immulite 1000
	ng/ml	26.7	21.3	32.1	
	nmol/l	89.4	71.5	107	Beckman Dxl Prog Cal 33555
	ng/ml	28.0	22.4	33.6	
	nmol/l	94.7	75.8	114	Roche Elecsys (Prog. II)
	ng/ml	29.6	23.7	35.5	
	nmol/l	89.4	71.5	107	Beckman Access Prog Cal 33555
	ng/ml	28.0	22.4	33.6	
	nmol/l	106	84.8	127	Tosoh Series
	ng/ml	33.2	26.5	39.9	
	nmol/l	100	80.0	120	Vitros Eci
	ng/ml	31.3	25.0	37.6	
	nmol/l	99.0	79.2	119	Roche Cobas 4000/e411 (Prog. II)
	ng/ml	31.0	24.8	37.2	
	nmol/l	98.7	79.0	118	Roche Cobas e601/602 (Prog. II)
	ng/ml	30.9	24.7	37.1	
	nmol/l	85.1	68.1	102	Beckman Dxl Prog DE Cal A80773
	ng/ml	26.6	21.3	31.9	
	nmol/l	89.8	71.8	108	Beckman Access Prog DE Cal A80773
	ng/ml	28.1	22.5	33.7	
nmol/l	70.1	56.1	84.1	Siemens Centaur CP	
ng/ml	21.9	17.6	26.2		
nmol/l	98.3	78.6	118	Roche Cobas e601/602 (Prog. III)	
ng/ml	30.8	24.6	37.0		
nmol/l	97.3	77.8	117	Roche Elecsys (Prog. III)	
ng/ml	30.5	24.4	36.6		
nmol/l	97.7	78.2	117	Roche Cobas 4000/e411 (Prog. III)	
ng/ml	30.6	24.5	36.7		
nmol/l	87.2	69.8	105	Diasorin Liaison XL	
ng/ml	27.3	21.8	32.8		

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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
Progesterone	nmol/l	85.5	68.4	103	Abbott Alinity i
	ng/ml	26.8	21.4	32.2	
	nmol/l	76.2	61.0	91.4	Siemens Atellica IM
	ng/ml	23.9	19.1	28.7	
	nmol/l	98.1	78.5	118	Roche Cobas e801 (Prog. III)
	ng/ml	30.7	24.6	36.8	
Prolactin	nmol/l	101	80.8	121	Tosoh AIA-CL Series
	ng/ml	31.6	25.3	37.9	
	µU/ml	1300	1040	1560	Abbott Architect
	µU/ml	1375	1100	1650	BioMerieux Vidas
	µU/ml	1026	821	1231	Siemens Centaur XP/XPT/Classic
	µU/ml	1159	927	1391	Siemens Immulite 2000/2500
	µU/ml	1282	1026	1538	Siemens Immulite 1000
	µU/ml	1079	863	1295	Beckman DxI800
	µU/ml	1555	1244	1866	Roche Elecsys
	µU/ml	1129	903	1355	Beckman Access
	µU/ml	1235	988	1482	Tosoh Series
	µU/ml	1052	842	1262	Vitros ECi
	µU/ml	1558	1246	1870	Roche Elecsys/E170/Cobas 6000/8000 PRLII
	µU/ml	1394	1115	1673	Immunotech IRMA
	µU/ml	1603	1282	1924	Roche Cobas 4000/E411
	µU/ml	1556	1245	1867	Roche Cobas e601/602
	µU/ml	1042	834	1250	Siemens Centaur CP
	µU/ml	1337	1070	1604	Mindray CL 8000i / 6000i / 2000i / 1200i / 1000i
µU/ml	1437	1150	1724	Diasorin Liaison XL	
µU/ml	1063	850	1276	Siemens Atellica IM	
µU/ml	1337	1070	1604	Abbott Alinity i	
µU/ml	1520	1216	1824	Roche Cobas e801 PRL II	
PSA Free	ng/ml = µg/l	22.7	17.0	28.4	Abbott Architect
	ng/ml = µg/l	25.8	19.4	32.3	BioMerieux Vidas
	ng/ml = µg/l	18.2	13.7	22.8	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	16.6	12.5	20.8	Siemens Immulite 2000/2500
	ng/ml = µg/l	15.2	11.4	19.0	Siemens Immulite 1000
	ng/ml = µg/l	22.3	16.7	27.9	Beckman DXI standardised to Hybritech
	ng/ml = µg/l	17.4	13.1	21.8	Roche Elecsys
	ng/ml = µg/l	18.2	13.7	22.8	Diasorin Liaison
	ng/ml = µg/l	22.3	16.7	27.9	Beckman Access standardised to Hybritech
	ng/ml = µg/l	17.0	12.8	21.3	Tosoh Series
	ng/ml = µg/l	17.6	13.2	22.0	Roche Cobas 4000/E411
	ng/ml = µg/l	17.6	13.2	22.0	Roche Cobas e601/602
	ng/ml = µg/l	19.9	14.9	24.9	Beckman DxI800 standardised to WHO IRP96/670
	ng/ml = µg/l	16.2	12.2	20.3	Ortho Vitros 3600/5600/ECi PSA II
	ng/ml = µg/l	14.9	11.2	18.6	Fujirebio Lumipulse G Series
ng/ml = µg/l	16.6	12.5	20.8	Diasorin Liaison XL	
ng/ml = µg/l	19.0	14.3	23.8	Siemens Atellica IM	

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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
PSA Free	ng/ml = µg/l	21.4	16.1	26.8	Abbott Alinity i
	ng/ml = µg/l	16.7	12.5	20.9	Roche Cobas e402/e801
PSA Total	ng/ml = µg/l	17.1	12.8	21.4	Abbott Architect
	ng/ml = µg/l	21.2	15.9	26.5	BioMerieux Vidas
	ng/ml = µg/l	20.9	15.7	26.1	bioMerieux VIDAS TPSA
	ng/ml = µg/l	22.2	16.7	27.8	Siemens Centaur XP/XPT/Classic
	ng/ml = µg/l	19.3	14.5	24.1	Siemens Immulite 2000/2500 1st generation
	ng/ml = µg/l	19.5	14.6	24.4	Siemens Immulite 1000 1st generation
	ng/ml = µg/l	23.9	17.9	29.9	Beckman Dxl standardisd to Hybritech
	ng/ml = µg/l	19.7	14.8	24.6	Beckman Dxl800 standardised to WHO IRP96/670
	ng/ml = µg/l	23.3	17.5	29.1	Roche Elecsys
	ng/ml = µg/l	22.7	17.0	28.4	Diasorin Liaison
	ng/ml = µg/l	24.4	18.3	30.5	Beckman Access standardised to Hybritech
	ng/ml = µg/l	24.3	18.2	30.4	Beckman Access standardised to WHO IRP96/670
	ng/ml = µg/l	16.0	12.0	20.0	Tosoh Series
	ng/ml = µg/l	22.6	17.0	28.3	Vitros ECi
	ng/ml = µg/l	17.4	13.1	21.8	Immunotech IRMA
	ng/ml = µg/l	23.3	17.5	29.1	Roche Cobas 4000/E411
	ng/ml = µg/l	23.3	17.5	29.1	Roche Cobas e601/602
	ng/ml = µg/l	42.8	32.1	53.5	Monobind Inc. ELISA / CLIA
	ng/ml = µg/l	16.3	12.2	20.4	Fujirebio Lumipulse G Series
	ng/ml = µg/l	22.9	17.2	28.6	Ortho Vitros 3600/5600/ECi PSA II
ng/ml = µg/l	22.1	16.6	27.6	Siemens Centaur CP	
ng/ml = µg/l	22.8	17.1	28.5	Diasorin Liaison XL	
ng/ml = µg/l	23.6	17.7	29.5	Siemens Atellica IM	
ng/ml = µg/l	17.7	13.3	22.1	Abbott Alinity i	
ng/ml = µg/l	22.6	17.0	28.3	Roche Cobas e402/e801	
Salicylic Acid	mmol/l	2.75	2.20	3.30	Roche Cobas c501/502/503
	mg/dl	38.0	30.4	45.6	
	mmol/l	2.86	2.29	3.43	EMIT
	mg/dl	39.5	31.6	47.4	
	mmol/l	2.88	2.30	3.46	Gravimetric
mg/dl	39.8	31.8	47.8		
SHBG	nmol/l	39.8	31.8	47.8	Siemens Immulite 2000/2500
	nmol/l	40.2	32.2	48.2	Abbott Architect
	nmol/l	42.0	33.6	50.4	Beckman Dxl800
	nmol/l	40.3	32.2	48.4	Siemens Atellica IM
	nmol/l	37.6	30.1	45.1	Roche analysers - 413417/15
	nmol/l	36.0	28.8	43.2	Roche Cobas e801 - 413429
	nmol/l	39.4	31.5	47.3	Abbott Alinity i
T Uptake	%U	38.6	31.7	45.5	Siemens Immulite 2000
Testosterone	nmol/l	27.7	22.2	33.2	Abbott Architect
	ng/ml	7.98	6.39	9.57	
	ng/dl	798	639	957	
	nmol/l	25.7	20.6	30.8	BioMerieux Vidas
	ng/ml	7.40	5.93	8.87	
ng/dl	740	593	887		

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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
Testosterone	nmol/l	25.5	20.4	30.6	Siemens Centaur XP/XPT/Classic
	ng/ml	7.34	5.88	8.80	
	ng/dl	734	588	880	
	nmol/l	31.9	25.5	38.3	Siemens Immulite 2000/2500
	ng/ml	9.19	7.34	11.0	
	ng/dl	919	734	1104	
	nmol/l	46.2	37.0	55.4	Siemens Immulite 1000
	ng/ml	13.3	10.7	15.9	
	ng/dl	1331	1066	1596	
	nmol/l	23.8	19.0	28.6	Beckman Dxl800
	ng/ml	6.85	5.47	8.23	
	ng/dl	685	547	823	
	nmol/l	25.6	20.5	30.7	Beckman Access
	ng/ml	7.37	5.90	8.84	
	ng/dl	737	590	884	
	nmol/l	37.8	30.2	45.4	Tosoh Series
	ng/ml	10.9	8.70	13.1	
	ng/dl	1089	870	1308	
	nmol/l	37.6	30.1	45.1	Vitros ECi
	ng/ml	10.8	8.67	12.9	
	ng/dl	1083	867	1299	
	nmol/l	27.9	22.3	33.5	Roche Cobas e601/602 Test II
	ng/ml	8.04	6.42	9.66	
	ng/dl	804	642	966	
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	27.7	22.2	33.2	Roche Cobas 4000/e411 Test II	
ng/ml	7.98	6.39	9.57		
ng/dl	798	639	957		
nmol/l	27.0	21.6	32.4	Abbott Architect 2nd Generation	
ng/ml	7.78	6.22	9.34		
ng/dl	778	622	934		
nmol/l	26.1	20.9	31.3	Siemens Centaur CP	
ng/ml	7.52	6.02	9.02		
ng/dl	752	602	902		
nmol/l	26.1	20.9	31.3	BioMerieux Vidas Testosterone II	
ng/ml	7.52	6.02	9.02		
ng/dl	752	602	902		
nmol/l	41.1	32.9	49.3	Mindray CL 8000i / 6000i / 2000i / 1200i / 1000i	
ng/ml	11.8	9.48	14.1		
ng/dl	1184	948	1420		
nmol/l	25.3	20.2	30.4	Siemens Centaur TST II	
ng/ml	7.29	5.82	8.76		
ng/dl	729	582	876		

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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
Testosterone	nmol/l	11.8	9.44	14.2	Diasorin Liaison XL
	ng/ml	3.40	2.72	4.08	
	ng/dl	340	272	408	
	nmol/l	26.3	21.0	31.6	Siemens Atellica IM
	ng/ml	7.57	6.05	9.09	
	ng/dl	757	605	909	
	nmol/l	27.6	22.1	33.1	Roche Cobas e801 Test II
	ng/ml	7.95	6.36	9.54	
	ng/dl	795	636	954	
	nmol/l	34.7	27.8	41.6	Tosoh AIA-CL Series
	ng/ml	9.99	8.01	12.0	
	ng/dl	999	801	1197	
nmol/l	27.1	21.7	32.5	Abbott Alinity i	
ng/ml	7.80	6.25	9.35		
ng/dl	780	625	935		
Theophylline	µmol/l	164	131	197	Roche Integra
	µg/ml	29.6	23.6	35.6	
	µmol/l	149	119	179	Abbott Architect (CMIA)
	µg/ml	26.8	21.4	32.2	
	µmol/l	155	124	186	Roche Cobas 6000/8000
	µg/ml	27.9	22.3	33.5	
	µmol/l	149	119	179	Beckman AU400/600/640/2700/5400
	µg/ml	26.8	21.4	32.2	
Thyroglobulin	µmol/l	158	126	190	Abbott Alinity Enzyme-Immu
	µg/ml	28.5	22.7	34.3	
	µmol/l	166	133	199	Gravimetric
	µg/ml	29.9	24.0	35.9	
	ng/ml	27.8	20.9	34.8	Siemens Immulite 2000
	ng/ml	59.4	44.6	74.3	Roche Elecsys
	ng/ml	48.7	36.5	60.9	Beckman Dxl800
	ng/ml	61.6	46.2	77.0	Roche Cobas 4000/E411
	ng/ml	60.0	45.0	75.0	Roche Cobas e601/602
	ng/ml	50.1	37.6	62.6	Beckman Access
	ng/ml	63.4	47.6	79.3	Abbott Architect 2000i
	ng/ml	56.4	42.3	70.5	Tosoh Series
	ng/ml	60.2	45.2	75.3	Roche Cobas e601/602 Tg II
	ng/ml	60.2	45.2	75.3	Roche Elecsys TGII
	ng/ml	60.4	45.3	75.5	Roche Cobas 4000/E411 TGII
	ng/ml	52.4	39.3	65.5	Diasorin Liaison XL
ng/ml	58.4	43.8	73.0	Roche Cobas e801 Tg II	
ng/ml	55.1	41.3	68.9	DiaSorin Liaison XL TG II Gen	
ng/ml	61.8	46.4	77.3	Abbott Alinity i	
Thyroid Stimulating Hormone	µU/ml = mIU/l	18.5	14.8	22.2	Abbott Architect
	µU/ml = mIU/l	20.6	16.5	24.7	bioMerieux VIDAS TSH
	µU/ml = mIU/l	18.9	15.1	22.7	bioMerieux VIDAS TSH3 Ultrasensitive
	µU/ml = mIU/l	23.8	19.0	28.6	Siemens Centaur XP/XPT/Classic

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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Range					
Analyte	unit	Target	low	high	methods
Thyroid Stimulating Hormone	µU/ml = mIU/l	23.7	19.0	28.4	Siemens Centaur XP/XPT/Classic 3rd Generation
	µU/ml = mIU/l	21.2	17.0	25.4	Siemens Immulite 2000/2500
	µU/ml = mIU/l	21.7	17.4	26.0	Siemens Immulite 1000
	µU/ml = mIU/l	21.3	17.0	25.6	Beckman Dxl800
	µU/ml = mIU/l	22.1	17.7	26.5	Roche Elecsys
	µU/ml = mIU/l	33.3	26.6	40.0	Diasorin Liaison
	µU/ml = mIU/l	21.1	16.9	25.3	Beckman Access Fast TSH
	µU/ml = mIU/l	21.0	16.8	25.2	Beckman Access hyperTSH 3rd Generation
	µU/ml = mIU/l	26.3	21.0	31.6	Tosoh Series
	µU/ml = mIU/l	28.3	22.6	34.0	Vitros ECi
	µU/ml = mIU/l	20.0	16.0	24.0	Immunotech IRMA
	µU/ml = mIU/l	22.4	17.9	26.9	Roche Cobas 4000/E411
	µU/ml = mIU/l	22.4	17.9	26.9	Roche Cobas e601/602
	µU/ml = mIU/l	20.1	16.1	24.1	Beckman Dxl800 Hyper TSH
	µU/ml = mIU/l	23.5	18.8	28.2	Siemens Centaur XP/XPT/Classic TSH3-Ultra
	µU/ml = mIU/l	22.3	17.8	26.8	Siemens Centaur CP
	µU/ml = mIU/l	22.2	17.8	26.6	Siemens Centaur CP TSH3-Ultra
	µU/ml = mIU/l	28.9	23.1	34.7	Mindray CL 8000i / 6000i / 2000i / 1200i / 1000i
	µU/ml = mIU/l	20.9	16.7	25.1	Beckman Dxl 600/800 Access (3rd IS)
	µU/ml = mIU/l	34.1	27.3	40.9	Diasorin Liaison XL
µU/ml = mIU/l	24.0	19.2	28.8	Siemens Atellica IM	
µU/ml = mIU/l	18.6	14.9	22.3	Abbott Alinity i	
µU/ml = mIU/l	21.1	16.9	25.3	Roche Cobas e402/e801	
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	236	189	283	Abbott Architect
	IU/ml	0.236	0.189	0.283	
	mU/ml=IU/l	424	339	509	BioMerieux Vidas
	IU/ml	0.424	0.339	0.509	
	mU/ml=IU/l	207	166	248	Siemens Centaur XP/XPT/Classic
	IU/ml	0.207	0.166	0.248	
	mU/ml=IU/l	400	320	480	Siemens Dimension
	IU/ml	0.400	0.320	0.480	
	mU/ml=IU/l	442	354	530	Siemens Immulite 2000
	IU/ml	0.442	0.354	0.530	
	mU/ml=IU/l	465	372	558	Siemens Immulite 1000
	IU/ml	0.465	0.372	0.558	
	mU/ml=IU/l	249	199	299	Beckman Dxl800
	IU/ml	0.249	0.199	0.299	
	mU/ml=IU/l	275	220	330	Roche Cobas Core EIA
	IU/ml	0.275	0.220	0.330	
	mU/ml=IU/l	242	194	290	Beckman Access
	IU/ml	0.242	0.194	0.290	
mU/ml=IU/l	404	323	485	Tosoh Series	
IU/ml	0.404	0.323	0.485		
mU/ml=IU/l	414	331	497	Vitros ECi	
IU/ml	0.414	0.331	0.497		

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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
Total Beta hCG	mU/ml=IU/l	226	181	271	Roche hCG STAT (Intact)
	IU/ml	0.226	0.181	0.271	
	mU/ml=IU/l	272	218	326	Roche hCG+Beta
	IU/ml	0.272	0.218	0.326	
	mU/ml=IU/l	244	195	293	Beckman Access Total BhCG (5th IS)
	IU/ml	0.244	0.195	0.293	
	mU/ml=IU/l	251	201	301	Beckman Dxl Total BhCG (5th IS)
	IU/ml	0.251	0.201	0.301	
	mU/ml=IU/l	199	159	239	Siemens Centaur CP
	IU/ml	0.199	0.159	0.239	
	mU/ml=IU/l	155	124	186	Mindray CL Series
	IU/ml	0.155	0.124	0.186	
	mU/ml=IU/l	247	198	296	Diasorin Liaison XL
	IU/ml	0.247	0.198	0.296	
	mU/ml=IU/l	219	175	263	Siemens Atellica IM
	IU/ml	0.219	0.175	0.263	
	mU/ml=IU/l	235	188	282	Abbott Alinity i
	IU/ml	0.235	0.188	0.282	
mU/ml=IU/l	268	214	322	Roche hCG+Beta e801	
IU/ml	0.268	0.214	0.322		
mU/ml=IU/l	499	399	599	Tosoh AIA-CL Series	
IU/ml	0.499	0.399	0.599		
Total T3	nmol/l	5.17	3.88	6.46	Abbott Architect
	ng/ml	3.37	2.53	4.21	
	ng/dl	337	253	421	
	nmol/l	5.58	4.19	6.98	BioMerieux Vidas
	ng/ml	3.63	2.73	4.53	
	ng/dl	363	273	453	
	nmol/l	6.42	4.82	8.03	Siemens Centaur XP/XPT/Classic
	ng/ml	4.18	3.14	5.22	
	ng/dl	418	314	522	
	nmol/l	5.83	4.37	7.29	Siemens Immulite 2000/2500
	ng/ml	3.80	2.84	4.76	
	ng/dl	380	284	476	
	nmol/l	5.64	4.23	7.05	Siemens Immulite 1000
	ng/ml	3.67	2.75	4.59	
	ng/dl	367	275	459	
	nmol/l	5.63	4.22	7.04	Beckman Dxl800
	ng/ml	3.67	2.75	4.59	
	ng/dl	367	275	459	
nmol/l	6.17	4.63	7.71	Roche Elecsys	
ng/ml	4.02	3.01	5.03		
ng/dl	402	301	503		
nmol/l	5.67	4.25	7.09	Beckman Access	
ng/ml	3.69	2.77	4.61		
ng/dl	369	277	461		



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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
Total T3	nmol/l	5.24	3.93	6.55	Tosoh Series
	ng/ml	3.41	2.56	4.26	
	ng/dl	341	256	426	
	nmol/l	6.88	5.16	8.60	Vitros ECi
	ng/ml	4.48	3.36	5.60	
	ng/dl	448	336	560	
	nmol/l	6.09	4.57	7.61	Roche Cobas 4000/E411
	ng/ml	3.96	2.98	4.94	
	ng/dl	396	298	494	
	nmol/l	4.76	3.57	5.95	Immunotech RIA
	ng/ml	3.10	2.32	3.88	
	ng/dl	310	232	388	
	nmol/l	5.93	4.45	7.41	Roche Cobas e601/602
	ng/ml	3.86	2.90	4.82	
	ng/dl	386	290	482	
	nmol/l	6.99	5.24	8.74	Siemens Centaur CP
	ng/ml	4.55	3.41	5.69	
	ng/dl	455	341	569	
	nmol/l	5.08	3.81	6.35	Mindray CL Series
	ng/ml	3.31	2.48	4.14	
	ng/dl	331	248	414	
nmol/l	4.74	3.56	5.93	Diasorin Liaison XL	
ng/ml	3.09	2.32	3.86		
ng/dl	309	232	386		
nmol/l	5.12	3.84	6.40	Abbott Alinity i	
ng/ml	3.33	2.50	4.16		
ng/dl	333	250	416		
nmol/l	6.78	5.09	8.48	Siemens Atellica IM	
ng/ml	4.41	3.31	5.51		
ng/dl	441	331	551		
nmol/l	6.27	4.70	7.84	Roche Cobas e402/e801	
ng/ml	4.08	3.06	5.10		
ng/dl	408	306	510		
nmol/l	5.55	4.16	6.94	Tosoh AIA-CL Series	
ng/ml	3.61	2.71	4.51		
ng/dl	361	271	451		
Total T4	nmol/l	206	155	258	Abbott Architect
	µg/dl	16.1	12.1	20.1	
	ng/ml	161	121	201	
	nmol/l	221	166	276	BioMerieux Vidas
	µg/dl	17.2	12.9	21.5	
	ng/ml	172	129	215	
	nmol/l	226	170	283	Siemens Centaur XP/XPT/Classic
	µg/dl	17.6	13.3	21.9	
	ng/ml	176	133	219	

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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
Total T4	nmol/l	201	151	251	Siemens Immulite 2000/2500
	µg/dl	15.7	11.8	19.6	
	ng/ml	157	118	196	
	nmol/l	224	168	280	Beckman DxI800
	µg/dl	17.5	13.1	21.9	
	ng/ml	175	131	219	
	nmol/l	186	140	233	Roche Elecsys
	µg/dl	14.5	10.9	18.1	
	ng/ml	145	109	181	
	nmol/l	219	164	274	Beckman Access
	µg/dl	17.1	12.8	21.4	
	ng/ml	171	128	214	
	nmol/l	195	146	244	Tosoh Series
	µg/dl	15.2	11.4	19.0	
	ng/ml	152	114	190	
	nmol/l	218	164	273	Vitros ECi
	µg/dl	17.0	12.8	21.2	
	ng/ml	170	128	212	
	nmol/l	194	146	243	Roche Cobas 4000/E411
	µg/dl	15.1	11.4	18.8	
	ng/ml	151	114	188	
	nmol/l	185	139	231	Roche Cobas e601/602
	µg/dl	14.4	10.8	18.0	
	ng/ml	144	108	180	
	nmol/l	161	121	201	Immunotech IRMA
	µg/dl	12.6	9.44	15.8	
	ng/ml	126	94.4	158	
	nmol/l	236	177	295	Siemens Centaur CP
	µg/dl	18.4	13.8	23.0	
	ng/ml	184	138	230	
nmol/l	230	173	288	Mindray CL Series	
µg/dl	17.9	13.5	22.3		
ng/ml	179	135	223		
nmol/l	200	150	250	Diasorin Liaison XL	
µg/dl	15.6	11.7	19.5		
ng/ml	156	117	195		
nmol/l	203	152	254	Abbott Alinity i	
µg/dl	15.8	11.9	19.7		
ng/ml	158	119	197		
nmol/l	233	175	291	Siemens Atellica IM	
µg/dl	18.2	13.7	22.7		
ng/ml	182	137	227		
nmol/l	181	136	226	Roche Cobas e402/e801	
µg/dl	14.1	10.6	17.6		
ng/ml	141	106	176		
nmol/l	224	168	280	Tosoh AIA-CL Series	
µg/dl	17.5	13.1	21.9		
ng/ml	175	131	219		

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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
Valproic Acid	µmol/l	916	733	1099	Abbott Architect (CMIA)
	µg/ml	132	106	158	
	µmol/l	996	797	1195	Siemens Centaur XP/XPT/Classic
	µg/ml	144	115	173	
	µmol/l	892	714	1070	Siemens Dimension
	µg/ml	129	103	155	
	µmol/l	977	782	1172	Siemens Immulite 2000/2500
	µg/ml	141	113	169	
	µmol/l	915	732	1098	Roche Integra
	µg/ml	132	106	158	
	µmol/l	912	730	1094	Roche Cobas 6000/8000
	µg/ml	132	105	159	
	µmol/l	958	766	1150	Beckman AU400/600/640/2700/5400
	µg/ml	138	111	165	
	µmol/l	883	706	1060	Abbott Architect (PETINA)
	µg/ml	127	102	152	
	µmol/l	990	792	1188	EMIT
	µg/ml	143	114	172	
	µmol/l	906	725	1087	Siemens Atellica CH
	µg/ml	131	105	157	
µmol/l	939	751	1127	Abbott Alinity (CMIA)	
µg/ml	135	108	162		
µmol/l	925	740	1110	Abbott Alinity (PETINA)	
µg/ml	133	107	159		
µmol/l	1116	893	1339	Gravimetric	
µg/ml	161	129	193		
Vancomycin	µmol/l	10.6	8.48	12.7	Roche Integra
	µg/ml	15.7	12.6	18.8	
	µmol/l	9.29	7.43	11.1	Ortho Vitros Microslide Systems
	µg/ml	13.8	11.0	16.6	
	µmol/l	12.1	9.68	14.5	Abbott Architect (CMIA)
	µg/ml	18.0	14.4	21.6	
	µmol/l	9.18	7.34	11.0	Siemens Centaur XP/XPT/Classic
	µg/ml	13.6	10.9	16.3	
	µmol/l	11.5	9.20	13.8	Siemens Dimension
	µg/ml	17.1	13.7	20.5	
	µmol/l	11.0	8.80	13.2	Roche Cobas 6000/8000
	µg/ml	16.3	13.1	19.5	
	µmol/l	11.3	9.04	13.6	Abbott Architect (PETINA)
	µg/ml	16.8	13.4	20.2	
	µmol/l	10.6	8.48	12.7	Siemens Atellica CH
	µg/ml	15.7	12.6	18.8	
µmol/l	11.5	9.20	13.8	Abbott Alinity (CMIA)	
µg/ml	17.1	13.7	20.5		

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

Cat. No. IA3111 / IA3112 Lot. No. 2181EC Size 12 x 5ml / 4 x 5ml Expiry 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
Vancomycin	µmol/l	10.9	8.72	13.1	Abbott Alinity (PETINA)
	µg/ml	16.2	13.0	19.4	
	µmol/l	10.8	8.64	13.0	Gravimetric
	µg/ml	16.0	12.8	19.3	
Vitamin B12	pmol/l	563	450	676	Abbott Architect
	pg/ml	763	610	916	
	pmol/l	617	494	740	Siemens Centaur XP/XPT/Classic
	pg/ml	836	669	1003	
	pmol/l	633	506	760	Siemens Immulite 2000
	pg/ml	858	686	1030	
	pmol/l	500	400	600	Beckman Dxl800
	pg/ml	678	542	814	
	pmol/l	597	478	716	Roche Elecsys
	pg/ml	809	648	970	
	pmol/l	516	413	619	Beckman Access
	pg/ml	699	560	838	
	pmol/l	774	619	929	Tosoh Series
	pg/ml	1049	839	1259	
	pmol/l	593	474	712	Vitros Eci
	pg/ml	804	642	966	
	pmol/l	566	453	679	Siemens Dimension
	pg/ml	767	614	920	
	pmol/l	681	545	817	Siemens Centaur CP
	pg/ml	923	738	1108	
	pmol/l	614	491	737	Roche Cobas 4000/e411 Gen II
	pg/ml	832	665	999	
	pmol/l	638	510	766	Roche Cobas e601/602 Gen II
	pg/ml	864	691	1037	
pmol/l	826	661	991	Mindray CL Series	
pg/ml	1119	896	1342		
pmol/l	648	518	778	Siemens Atellica IM	
pg/ml	878	702	1054		
pmol/l	555	444	666	Abbott Alinity i	
pg/ml	752	602	902		
pmol/l	622	498	746	Roche Cobas e801 Gen II	
pg/ml	843	675	1011		

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

<b>CAT. NO.</b> IA3111	<b>GTIN:</b> 05055273207279	<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> 2181EC	<b>EXPIRY:</b> 2025-06-28	

### 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 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. Parathyroid Hormone (PTH) is present in the control, but no claim is made for the expected value or stability of this analyte.

EC	REP
----	-----

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

(S). 27 Mar '23 me

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

Cat. No. IA3111 / IA3112 Lot No. 2181EC Size: 12 x 5ml / 4 x 5ml Expiry: 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
Alpha-fetoprotein	KIU/l = IU/ml	155	124	186	Beckman Access / Access 2
	ng/ml	188	150	226	
	KIU/l = IU/ml	149	119	179	Beckman Dxl600/800
	ng/ml	180	144	216	
CA 15-3	U/ml	31.9	25.5	38.3	Beckman Access / Access 2
	U/ml	32.4	25.9	38.9	Beckman Dxl600/800
CA 19-9	U/ml	396	317	475	Beckman Access / Access 2
	U/ml	357	286	428	Beckman Dxl600/800
CA125	U/ml	155	124	186	Beckman Access / Access 2
	U/ml	155	124	186	Beckman Dxl600/800
Carcinoembryonic Antigen (CEA)	ng/ml = µg/l	58.9	47.1	70.7	Beckman Access / Access 2
	ng/ml = µg/l	57.4	45.9	68.9	Beckman Dxl600/800
Cortisol	nmol/l	1119	839	1399	Beckman Access / Access 2
	µg/dl	40.3	30.2	50.4	Beckman Dxl600/800
	nmol/l	1033	775	1291	
	µg/dl	37.2	27.9	46.5	
DHEA-S	µmol/l	19.6	15.7	23.5	Beckman Access / Access 2
	µg/dl	722	578	866	Beckman Dxl600/800
	µmol/l	17.1	13.7	20.5	
Digoxin	µg/dl	630	504	756	Beckman Access / Access 2
	nmol/l	5.21	4.17	6.25	
	ng/ml	4.07	3.26	4.88	Beckman Dxl600/800
	nmol/l	4.93	3.94	5.92	
Ferritin	ng/ml	3.85	3.08	4.62	Beckman Access / Access 2
	ng/ml = µg/l	221	177	265	
Folate	ng/ml = µg/l	217	174	260	Beckman Dxl600/800
	nmol/l	20.4	15.5	25.3	Beckman Access / Access 2
Free T3	ng/ml	9.00	6.84	11.2	Beckman Access / Access 2
	nmol/l	20.3	15.4	25.2	
	ng/ml	8.95	6.79	11.1	Beckman Dxl600/800 - A98032
	nmol/l	19.9	15.1	24.7	
	ng/ml	8.78	6.66	10.9	Beckman Dxl600/800 - A14208
	pmol/l	18.1	13.6	22.6	
Free T4	ng/dl	1.18	0.884	1.48	Beckman Access / Access 2
	pg/ml	11.8	8.85	14.8	
	pmol/l	16.4	12.3	20.5	Beckman Dxl600/800
	ng/dl	1.07	0.800	1.34	
	pg/ml	10.7	8.01	13.4	Beckman Access / Access 2
	pmol/l	54.8	41.1	68.5	
FSH	ng/dl	4.27	3.21	5.33	Beckman Access / Access 2
	pg/ml	42.7	32.1	53.3	
	pmol/l	58.4	43.8	73.0	Beckman Dxl600/800
	ng/dl	4.56	3.42	5.70	
	pg/ml	45.6	34.2	57.0	Beckman Access / Access 2
	mU/ml	64.8	51.8	77.8	
Growth Hormone (GH)	mU/ml	66.6	53.3	79.9	Beckman Dxl600/800
	µU/ml	32.2	25.8	38.6	Beckman Access / Access 2
	ng/ml	10.7	8.59	12.8	
	µU/ml	30.2	24.2	36.2	Beckman Dxl600/800
Insulin	ng/ml	10.1	8.06	12.1	Beckman Access / Access 2
	mU/l	29.9	22.4	37.4	
	mU/l	28.3	21.2	35.4	Beckman Dxl600/800
	mU/ml	41.1	32.9	49.3	Beckman Access / Access 2
Luteinising Hormone (LH)	mU/ml	40.6	32.5	48.7	Beckman Dxl600/800

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

Cat. No. IA3111 / IA3112 Lot No. 2181EC Size: 12 x 5ml / 4 x 5ml Expiry: 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
Oestradiol	pmol/l	1520	1216	1824	Beckman Access / Access 2
	pg/ml	413	331	495	
	pmol/l	1552	1242	1862	Beckman Access / Access 2 Sensitive B84493
	pg/ml	422	338	506	
	pmol/l	1379	1103	1655	Beckman Dxl600/800
	pg/ml	375	300	450	
Progesterone	pmol/l	1391	1113	1669	Beckman Dxl600/800 Sensitive B84493
	pg/ml	378	303	453	
	nmol/l	89.4	71.5	107	Beckman Access / Access 2 Prog Cal 33555
	ng/ml	28.0	22.4	33.6	
	nmol/l	89.8	71.8	108	Beckman Access / Access 2 Prog DE Cal A80773
	ng/ml	28.1	22.5	33.7	
Prolactin	nmol/l	89.4	71.5	107	Beckman Dxl600/800 Prog Cal 33555
	ng/ml	28.0	22.4	33.6	
	nmol/l	85.1	68.1	102	Beckman Dxl600/800 Prog DE Cal A80773
	ng/ml	26.6	21.3	31.9	
	µU/ml	1129	903	1355	Beckman Access / Access 2
	µg/l	53.3	42.6	64.0	
PSA Free	µU/ml	1079	863	1295	Beckman Dxl600/800
	µg/l	50.9	40.7	61.1	
	ng/ml = µg/l	22.3	16.7	27.9	Beckman Access / Access 2 standardised to Hybritech
	ng/ml = µg/l	22.3	16.7	27.9	Beckman Dxl600/800 standardised to Hybritech
PSA Total	ng/ml = µg/l	19.9	14.9	24.9	Beckman Dxl600/800 standardised to WHO IRP96/670
	ng/ml = µg/l	24.4	18.3	30.5	Beckman Access / Access 2 standardised to Hybritech
	ng/ml = µg/l	24.3	18.2	30.4	Beckman Access / Access 2 standardised to WHO IRP96/670
	ng/ml = µg/l	23.9	17.9	29.9	Beckman Dxl600/800 standardised to Hybritech
SHBG	ng/ml = µg/l	19.7	14.8	24.6	Beckman Dxl600/800 standardised to WHO IRP96/670
	nmol/l	37.2	29.8	44.6	Beckman Access / Access 2
Testosterone	nmol/l	42.0	33.6	50.4	Beckman Dxl600/800
	nmol/l	25.6	20.5	30.7	Beckman Access / Access 2
	ng/ml	7.37	5.90	8.84	
	ng/dl	737	590	884	
	nmol/l	23.8	19.0	28.6	Beckman Dxl600/800
	ng/ml	6.85	5.47	8.23	
Thyroglobulin	ng/dl	685	547	823	
	ng/ml	50.1	37.6	62.6	Beckman Access / Access 2
Thyroid Stimulating Hormone	ng/ml	48.7	36.5	60.9	Beckman Dxl600/800
	µU/ml = mIU/l	21.1	16.9	25.3	Beckman Access / Access 2 Fast TSH
	µU/ml = mIU/l	21.0	16.8	25.2	Beckman Access / Access 2 hyperTSH 3rd Generation
	µU/ml = mIU/l	21.3	17.0	25.6	Beckman Dxl600/800
	µU/ml = mIU/l	20.8	16.6	25.0	Beckman Dxl600/800 Fast TSH
	µU/ml = mIU/l	20.1	16.1	24.1	Beckman Dxl600/800 Hyper TSH
	µU/ml = mIU/l	20.9	16.7	25.1	Beckman Dxl600/800 Access (3rd IS)

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

Cat. No. IA3111 / IA3112		Lot No. 2181EC		Size: 12 x 5ml / 4 x 5ml		Expiry: 2025-06-28	
Analyte	unit	Target	Range		methods		
			low	high			
Total Beta hCG	mU/ml = IU/l	242	194	290	Beckman Access / Access 2		
	IU/ml	0.242	0.194	0.290			
	mU/ml = IU/l	244	195	293	Beckman Access / Access 2 Total BhCG (5th IS)		
	IU/ml	0.244	0.195	0.293			
	mU/ml = IU/l	249	199	299	Beckman Dxl600/800		
	IU/ml	0.249	0.199	0.299			
Total T3	mU/ml = IU/l	251	201	301	Beckman Dxl600/800 Total BhCG (5th IS)		
	IU/ml	0.251	0.201	0.301			
Total T4	nmol/l	5.67	4.25	7.09	Beckman Access / Access 2		
	ng/ml	3.69	2.77	4.61			
	ng/dl	369	277	461			
	nmol/l	5.63	4.22	7.04	Beckman Dxl600/800		
	ng/ml	3.67	2.75	4.59			
	ng/dl	367	275	459			
Total T4	nmol/l	219	164	274	Beckman Access / Access 2		
	µg/dl	17.1	12.8	21.4			
	ng/ml	171	128	214			
	nmol/l	224	168	280	Beckman Dxl600/800		
	µg/dl	17.5	13.1	21.9			
	ng/ml	175	131	219			
Vitamin B12	pmol/l	516	413	619	Beckman Access / Access 2		
	pg/ml	699	560	838			
	pmol/l	500	400	600	Beckman Dxl600/800		
	pg/ml	678	542	814			



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

<b>CAT. NO.</b>	IA3111	<b>GTIN:</b>	05055273207279	<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>	2181EC	<b>EXPIRY:</b>	2025-06-28		

### 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 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. 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).

EC	REP
----	-----

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

(S.) 18 Sep '23 me

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

Cat. No. IA3111 / IA3112		Lot No. 2181EC		Size: 12 x 5ml / 4 x 5ml		Expiry: 2025-06-28	
Analyte	unit	Target	Range		methods		
			low	high			
25-OH Vitamin D	nmol/l	106	79.5	133	Vitros Eci		
Alpha-fetoprotein	KIU/l = IU/ml	162	130	194	Vitros Eci		
CA 125	U/ml	179	143.0	215	Vitros Eci		
CA 15-3	U/ml	64.2	51.4	77.0	Vitros Eci		
CA 19-9	U/ml	346	277	415	Vitros Eci		
C-Peptide	nmol/l	2.860	2.150	3.580	Vitros Eci		
	ng/ml	8.63	6.49	10.8			
Carcinoembryonic Antigen (CEA)	ng/ml = µg/l	63.2	50.6	75.8	Vitros Eci		
Cortisol	nmol/l	922	692	1153	Vitros Eci		
	µg/dl	33.2	24.9	41.5			
Ferritin	ng/ml = µg/l	197	158	236	Vitros Eci		
Folate	nmol/l	12.8	9.73	15.9	Vitros Eci		
	ng/ml	5.64	4.29	6.99			
Free T3	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			
Free T4	pmol/l	89.8	67.4	112	Vitros Eci		
	ng/dl	7.00	5.26	8.74			
	pg/ml	70.0	52.6	87.4			
FSH	mU/ml	46.5	37.2	55.8	Vitros Eci		
Insulin	mU/l	25.0	18.8	31.3	Ortho Vitros 3600/5600/ECi/XT 7600		
	µU/ml	25.0	18.8	31.3			
Luteinising Hormone (LH)	mU/ml	61.2	49.0	73.4	Vitros Eci		
Oestradiol	pmol/l	2619	2095	3143	Vitros Eci		
	pg/ml	712	570	854			
Progesterone	nmol/l	100	80.0	120	Vitros Eci		
	ng/ml	31.3	25.0	37.6			
Prolactin	µU/ml	1052	842	1262	Vitros Eci		
PSA Free	ng/ml = µg/l	16.2	12.2	20.3	Ortho Vitros 3600/5600/ECi PSA II		
PSA Total	ng/ml = µg/l	22.6	17.0	28.3	Vitros Eci		
Testosterone	nmol/l	37.6	30.1	45.1	Vitros Eci		
	ng/ml	10.8	8.67	12.9			
	ng/dl	1083	867	1299			
Thyroid Stimulating Hormone	µU/ml = mIU/l	28.3	22.6	34.0	Vitros Eci		
Total Beta hCG	mU/ml=IU/l	414	331	497	Vitros Eci		
	IU/ml	0.414	0.331	0.497			
Vitamin B12	pmol/l	593	474	712	Vitros Eci		
	pg/ml	804	642	966			

**ADDITIONAL VALUES FOR  
IMMUNOASSAY PREMIUM PLUS - LEVEL 3  
(IA PREMIUM PLUS 3)  
Cat No. IA3111 / IA3112  
Lot No. 2181EC  
GTIN: 05055273207279 / 05055273207286**

COMPONENT	UNITS	TARGET	RANGE	METHOD
25-OH Vitamin D	nmol/l	98.8	74.1-124	Diasorin Liaison Series
Cortisol	nmol/l	1076	807-1345	Diasorin Liaison Series
	µg/dl	38.7	29.1-48.4	
FSH	mU/ml	87.6	70.1-105	Diasorin Liaison Series
Insulin	mU/l	34.1	25.6-42.6	Diasorin Liaison Series
	µU/ml	34.1	25.6-42.6	
Luteinising Hormone (LH)	mU/m	65.7	52.6-78.8	Diasorin Liaison Series
Prolactin	µU/ml	1434	1147-1721	Diasorin Liaison Series
Total Beta hCG	mU/ml=IU/l	242	194-290	Diasorin Liaison Series
	IU/ml	0.24	0.19-0.29	
Total T3	nmol/l	4.78	3.59-5.98	Diasorin Liaison Series
	ng/ml	3.11	2.34-3.89	
	ng/dl	311	234-389	

**EC REP**

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

Rev. 11 May '23 me

**ADDITIONAL VALUES FOR  
 IMMUNOASSAY PREMIUM PLUS - LEVEL 3  
 (IA PREMIUM PLUS 3)  
 Cat No. IA3111 / IA3112  
 Lot No. 2181EC  
 GTIN: 05055273207279 / 05055273207286**

COMPONENTS	UNITS	TARGET	RANGE	METHOD
Androstenedione	nmol/l	13.3	9.98 – 16.6	Roche Elecsys
	ng/ml	3.82	2.87 – 4.77	

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

05 Mar '24 me

**ADDITIONAL VALUES FOR  
IMMUNOASSAY PREMIUM PLUS - LEVEL 3  
(IA PREMIUM PLUS 3)  
Cat No. IA3111 / IA3112  
Lot No. 2181EC  
GTIN: 05055273207279 / 05055273207286**

COMPONENT	UNITS	TARGE T	RANGE	METHOD
17-OH Progesterone	nmol/l	39.3	27.5 - 51.1	SNIBE Maglumi Analysers
	ng/ml	13.0	9.10 - 16.9	
25-OH Vitamin D	nmol/l	81.4	57.0 - 106	SNIBE Maglumi Analysers
	ng/ml	32.6	22.8 - 42.4	
25-OH Vitamin D	nmol/l	125	87.5 - 163	SNIBE Maglumi Analysers II
	ng/ml	50.1	35.1 - 65.1	
Alpha-foetoprotein	KIU/l = IU/ml	180	126 - 234	SNIBE Maglumi Analysers
	ng/ml	218	153 - 283	
Androstenedione	nmol/l	17.6	12.3 - 22.9	SNIBE Maglumi Analysers
	ng/ml	5.05	3.54 - 6.56	
Beta-2-microglobulin	µg/ml = mg/l	5.36	3.75 - 6.97	SNIBE Maglumi Analysers
C-Peptide	nmol/l	3.24	2.27 - 4.21	SNIBE Maglumi Analysers
	ng/ml	9.78	6.85 - 12.7	
CA125	U/ml	168	118 - 218	SNIBE Maglumi Analysers
CA 15-3	U/ml	95.0	66.5 - 124	SNIBE Maglumi Analysers
CA 19-9	U/ml	128	89.6 - 166	SNIBE Maglumi Analysers
Carcinoembryonic Antigen (CEA)	ng/ml = µg/l	60.8	42.6 - 79.0	SNIBE Maglumi Analysers
Cortisol	nmol/l	1197	838 - 1556	SNIBE Maglumi Analysers
	µg/dl	43.1	30.2 - 56.0	
DHEA-S	µmol/l	20.4	14.3 - 26.5	SNIBE Maglumi Analysers
	µg/dl	752	526 - 978	
Digoxin	nmol/l	5.16	3.61 - 6.71	SNIBE Maglumi Analysers
	ng/ml	4.03	2.82 - 5.24	
Ferritin	ng/ml = µg/l	366	256 - 476	SNIBE Maglumi Analysers
Folate	nmol/l	29.7	20.8 - 38.6	SNIBE Maglumi Analysers
	ng/ml	13.1	9.17 - 17.0	

COMPONENT	UNITS	TARGET	RANGE	METHOD
Free T3	pmol/l	33.6	23.5 - 43.7	SNIBE Maglumi Analysers
	ng/dl	2.18	1.53 - 2.83	
	pg/ml	21.9	15.3 - 28.5	
Free T4	pmol/l	88.7	62.1 - 115	SNIBE Maglumi Analysers
	ng/dl	6.92	4.84 - 9.00	
	pg/ml	69.2	48.4 - 90.0	
FSH	mU/ml	72.4	50.7 - 94.1	SNIBE Maglumi Analysers
Growth Hormone (GH)	µU/ml	52.0	36.4 - 67.6	SNIBE Maglumi Analysers
	ng/ml	17.3	12.1 - 22.5	
Immunoglobulin E	KIU/l = IU/ml	436	305 - 567	SNIBE Maglumi Analysers
Insulin	mU/l	29.8	20.9 - 38.7	SNIBE Maglumi Analysers
	µU/ml	29.8	20.9 - 38.7	
Luteinising Hormone (LH)	mU/ml	73.7	51.6 - 95.8	SNIBE Maglumi Analysers
Oestradiol	pmol/l	3349	2344 - 4354	SNIBE Maglumi Analysers
	pg/ml	911	638 - 1184	
Progesterone	nmol/l	78.9	55.2 - 103	SNIBE Maglumi Analysers
	ng/ml	24.7	17.3 - 32.1	
Prolactin	µU/ml	1308	916 - 1700	SNIBE Maglumi Analysers
PSA Free	ng/ml = µg/l	18.2	12.7 - 23.7	SNIBE Maglumi Analysers
PSA Total	ng/ml = µg/l	19.6	13.7 - 25.5	SNIBE Maglumi Analysers
SHBG	nmol/l	49.2	34.4 - 64.0	SNIBE Maglumi Analysers
Testosterone	nmol/l	22.4	15.7 - 29.1	SNIBE Maglumi Analysers
	ng/ml	6.45	4.52 - 8.38	
	ng/dl	645	452 - 838	
Thyroid Stimulating Hormone	µU/ml = mIU/l	20.1	14.1 - 26.1	SNIBE Maglumi Analysers
Total Beta hCG	mU/ml=IU/l	416	291 - 541	SNIBE Maglumi Analysers
	IU/ml	0.416	0.291 - 0.541	
Total T3	nmol/l	5.10	3.57 - 6.63	SNIBE Maglumi Analysers
	ng/ml	3.32	2.32 - 4.32	
	ng/dl	332	232 - 432	

COMPONENT	UNITS	TARGET	RANGE	METHOD
Total T4	nmol/l	204	143 - 265	SNIBE Maglumi Analysers
	µg/dl	15.9	11.1 - 20.7	
	ng/ml	159	111 - 207	
Vitamin B12	pmol/l	576	403 - 749	SNIBE Maglumi Analysers
	pg/ml	780	546 - 1014	

**EC** **REP**

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

Rev. 09 Feb '23 me

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

<b>CAT. NO.</b> IA3111	<b>GTIN:</b> 05055273207279	<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> 2181EC	<b>EXPIRY:</b> 2025-06-28	

### 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 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. 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).

EC	REP
----	-----

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

(S). 05 Nov '24 me



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

Cat. No. IA3111 / IA3112 Lot No. 2181EC Size: 12 x 5ml / 4 x 5ml Expiry: 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
Alphafoetoprotein	ng/ml	207	135	280	Wiener Lab CLIA Series & Mindray CL 8000i/6000i/2000i/1200i/1000i
		214	139	289	Wiener Lab CLIA Series & Mindray CL 900i/920i/960i/980i
CA 15-3	U/ml	35.1	22.8	47.4	Wiener Lab CLIA Series & Mindray CL 8000i/6000i/2000i/1200i/1000i
		34.4	22.3	46.4	Wiener Lab CLIA Series & Mindray CL 900i/920i/960i/980i
CA 19-9	U/ml	150	97.3	202	Wiener Lab CLIA Series & Mindray CL 8000i/6000i/2000i/1200i/1000i
		160	104	216	Wiener Lab CLIA Series & Mindray CL 900i/920i/960i/980i
CA125	U/ml	266	173	359	Wiener Lab CLIA Series & Mindray CL 8000i/6000i/2000i/1200i/1000i
		258	167	348	Wiener Lab CLIA Series & Mindray CL 900i/920i/960i/980i
Carcinoembryonic Antigen (CEA)	ng/ml	64.6	42.0	87.2	Wiener Lab CLIA Series & Mindray CL 8000i/6000i/2000i/1200i/1000i
		65.8	42.8	88.8	Wiener Lab CLIA Series & Mindray CL 900i/920i/960i/980i
C-Peptide	ng/mL	8.32	6.07	10.6	Wiener Lab CLIA Series & Mindray CL 8000i/6000i/2000i/1200i/1000i
		7.66	5.59	9.73	Wiener Lab CLIA Series & Mindray CL 900i/920i/960i/980i
Cortisol	µg/dL	35.8	23.3	48.4	Wiener Lab CLIA Series & Mindray CL 8000i/6000i/2000i/1200i/1000i
		33.7	21.9	45.4	Wiener Lab CLIA Series & Mindray CL 900i/920i/960i/980i
DHEA-S	µg/dl	829	605	1053	Wiener Lab CLIA Series & Mindray CL 8000i/6000i/2000i/1200i/1000i
		815	595	1035	Wiener Lab CLIA Series & Mindray CL 900i/920i/960i/980i
Oestradiol	pg/mL	575	419	730	Wiener Lab CLIA Series & Mindray CL 8/6/2/12/1000i <= Lot 230501
		592	432	752	Wiener Lab CLIA Series & Mindray CL 900i <= Lot 230501
		602	409	795	Wiener Lab CLIA Series & Mindray CL 8/6/2/12/1000i >= Lot 231001
		602	409	795	Wiener Lab CLIA Series & Mindray CL 900i >= Lot 231001
Ferritin	ng/ml	309	226	393	Wiener Lab CLIA Series & Mindray CL 8000i/6000i/2000i/1200i/1000i
		314	229	399	Wiener Lab CLIA Series & Mindray CL 900i/920i/960i/980i
Folate	ng/ml	>20			Wiener Lab CLIA Series & Mindray CL 8000i/6000i/2000i/1200i/1000i
		>20			Wiener Lab CLIA Series & Mindray CL 900i/920i/960i/980i
FSH	mIU/mL	85.7	62.5	109	Wiener Lab CLIA Series & Mindray CL 8/6/2/12/1000i <= Lot 231101
		83.0	60.6	105	Wiener Lab CLIA Series & Mindray CL 900i <= Lot 231101
		67.0	40.2	93.8	Wiener Lab CLIA Series & Mindray CL 8/6/2/12/1000i >= Lot 240401
		67.0	40.2	93.8	Wiener Lab CLIA Series & Mindray CL 900i >= Lot 240401
Insulin	µIU/ml	29.8	19.4	40.2	Wiener Lab CLIA Series & Mindray CL 8000i/6000i/2000i/1200i/1000i
		33.5	21.8	45.3	Wiener Lab CLIA Series & Mindray CL 900i/920i/960i/980i
Luteinising Hormone (LH)	mIU/ml	57.5	42.0	73.0	Wiener Lab CLIA Series & Mindray CL 8000i/6000i/2000i/1200i/1000i
		55.5	40.5	70.5	Wiener Lab CLIA Series & Mindray CL 900i/920i/960i/980i
Prolactin	ng/ml	65.7	47.9	83.4	Wiener Lab CLIA Series & Mindray CL 8000i/6000i/2000i/1200i/1000i
		65.9	48.1	83.7	Wiener Lab CLIA Series & Mindray CL 900i/920i/960i/980i
PSA Free	ng/ml	20.7	15.1	26.3	Wiener Lab CLIA Series & Mindray CL 8000i/6000i/2000i/1200i/1000i
		20.7	15.1	26.3	Wiener Lab CLIA Series & Mindray CL 900i/920i/960i/980i
PSA Total	ng/ml	22.9	16.7	29.1	Wiener Lab CLIA Series & Mindray CL 8000i/6000i/2000i/1200i/1000i
		23.3	17.0	29.6	Wiener Lab CLIA Series & Mindray CL 900i/920i/960i/980i

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

Cat. No. IA3111 / IA3112 Lot No. 2181EC Size: 12 x 5ml / 4 x 5ml Expiry: 2025-06-28

Analyte	unit	Target	Range		methods
			low	high	
Testosterone	ng/mL	11.7	8.53	14.8	Wiener Lab CLIA Series & Mindray CL 8/6/2/12/1000i Ref: TESTO 11X
		12.0	8.78	15.3	Wiener Lab CLIA Series & Mindray CL 900i Ref: TESTO 11X
		10.6	7.71	13.4	Wiener Lab CLIA Series & Mindray CL 8/6/2/12/1000i Ref 105-0025XX-00
		10.7	7.81	13.6	Wiener Lab CLIA Series & Mindray CL 900i Ref 105-0025XX-00
		7.53	5.12	9.94	Wiener Lab CLIA Series & Mindray TESTO II CL 8/6/2/12/1000i
		7.53	5.12	9.94	Wiener Lab CLIA Series & Mindray TESTO II CL 900i
Total Beta hCG	mIU/mL	512	307	717	Wiener Lab CLIA Series & Mindray hCG2 8000/6000/2000/1200/1000i
		512	307	717	Wiener Lab CLIA Series & Mindray hCG2 CL 900i
		219	142	295	Wiener Lab CLIA Series & Mindray hCG 8000/6000/2000/1200/1000i
		205	133	276	Wiener Lab CLIA Series & Mindray hCG CL 900i/920i/960i/980i
Vitamin B12	pg/mL	1119	817	1422	Wiener Lab CLIA Series & Mindray CL 8000i/6000i/2000i/1200i/1000i
		1146	836	1455	Wiener Lab CLIA Series & Mindray CL 900i/920i/960i/980i
Thyroid Stimulating Hormone	µIU/mL	28.8	21.0	36.6	Wiener Lab CLIA Series & Mindray CL 8/6/2/12/1000i Ref: TSH 11X
		28.9	21.1	36.7	Wiener Lab CLIA Series & Mindray CL 900i Ref: TSH 11X
		21.6	14.7	28.5	Wiener Lab CLIA Series & Mindray CL 8/6/2/12/1000i TSH105-0042XX-00
		21.6	14.7	28.5	Wiener Lab CLIA Series & Mindray CL 900i TSH 105-0042XX-00
Free T3	pg/mL	13.8	10.1	17.6	Wiener Lab CLIA Series & Mindray CL 8/6/2/12/1000i Ref: FT3 11X
		13.8	10.0	17.5	Wiener Lab CLIA Series & Mindray CL 900i Ref: FT3 11X
		13.8	10.1	17.6	Wiener Lab CLIA Series & Mindray CL 8/6/2/12/1000i FT3 105-0042XX-00
		13.8	10.0	17.5	Wiener Lab CLIA Series & Mindray CL 900i FT3 105-0042XX-00
Free T4	ng/dL	4.47	3.26	5.67	Wiener Lab CLIA Series & Mindray CL 8/6/2/12/1000i Ref: FT4 11X
		4.30	3.14	5.46	Wiener Lab CLIA Series & Mindray CL 900i Ref: FT4 11X
		>6			Wiener Lab CLIA Series & Mindray CL 8/6/2/12/1000i FT4 105-0042XX-00
		>6			Wiener Lab CLIA Series & Mindray CL 900i FT4 105-0042XX-00
Total T3	ng/mL	3.01	2.20	3.82	Wiener Lab CLIA Series & Mindray CL 8/6/2/12/1000i Ref: T3 11X
		2.94	2.15	3.73	Wiener Lab CLIA Series & Mindray CL 900i Ref: T3 11X
		3.01	2.20	3.82	Wiener Lab CLIA Series & Mindray CL 8/6/2/12/1000i T3 105-0042XX-00
		2.94	2.15	3.73	Wiener Lab CLIA Series & Mindray CL 900i T3 105-0042XX-00
Total T4	µg/dL	17.1	12.5	21.7	Wiener Lab CLIA Series & Mindray CL 8/6/2/12/1000i Ref: T4 11X
		15.9	11.6	20.2	Wiener Lab CLIA Series & Mindray CL 900i Ref: T4 11X
		15.3	11.2	19.5	Wiener Lab CLIA Series & Mindray CL 8/6/2/12/1000i T4 105-0042XX-00
		15.3	11.1	19.4	Wiener Lab CLIA Series & Mindray CL 900i T4 105-0042XX-00
Progesterone	ng/mL	27.5	18.7	36.3	Wiener Lab CLIA Series & Mindray PROG II CL 8000i/6000i/2000i/1200i/1000i
		27.5	18.7	36.3	Wiener Lab CLIA Series & Mindray PROG II CL 900i