

HUMAN ASSAYED MULTI-SERA - LEVEL 2 (HUM ASY CONTROL 2)

CAT. NO. HNI530/ HS2611
SIZE: 20 x 5ml / 5 x 5ml

LOT NO. 823UN
EXPIRY: 2017-01

INTENDED USE

This product is intended for *in vitro* diagnostic use in the quality control of diagnostic assays. The Human Assayed Multi-sera is for the control of accuracy.

DEVICE DESCRIPTION

The Human Assayed Multi-sera is supplied at 2 levels, level 2 and 3. Target values and ranges are supplied for the analytes listed in the values section at both levels.

SAFETY PRECAUTIONS AND WARNINGS

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

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

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

Health and Safety Data Sheets are available on request.

STORAGE AND STABILITY

OPENED: Store refrigerated (+2°C to +8°C). Reconstituted serum is stable for 8 hours at +15°C to +25°C or 7 days at +2°C to +8°C, and 28 days when frozen once at -20°C (See Limitations).

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

LIMITATIONS

For Total & Prostatic Acid Phosphatase, the material should be stabilised by adding 1 drop (25-30 µl) of 0.7M Acetic acid solution to 1ml of the serum exactly 30 minutes after reconstitution. After stabilisation Total and Prostatic Acid Phosphatase is stable for 2 hours at +15°C to +25°C, 2 days at +2°C to +8°C and 28 days when frozen once at -20°C.

Alkaline Phosphatase levels in the reconstituted serum will rise over the stability period. It is recommended that the reconstituted serum be allowed to stand for 1 hour at +15°C to +25°C before measurement.

Bilirubin in the serum is light sensitive and it is recommended that the serum be stored in the dark. Stored in the dark it is stable for 4 days at +2°C to +8°C. Do not store at +15°C to +25°C. Do not freeze.

NEFA is stable for 1 day at +2°C to +8°C.

Total PSA is stable for 4 days at +2°C to +8°C, or 28 days in aliquots frozen at -20°C.

Bacterial contamination of the reconstituted serum will cause reductions in the stability of many components.

Different lot numbers of this control should not be interchanged, as the values assigned to the controls vary from lot to lot.

The control should not be used as a calibration material.

PREPARATION FOR USE

The Human Assayed Multi-sera is supplied lyophilised.

- Carefully reconstitute each vial of lyophilised serum with exactly 5ml 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

Human Assayed Multi-sera - Level 2 20 x 5ml / 5 x 5ml

MATERIALS REQUIRED BUT NOT PROVIDED

Volumetric pipette

ASSIGNED VALUES

Each batch of assayed human serum is submitted to reference laboratories for assignment against international Reference Standards. Where international Reference Standards are unavailable, Reference Methods are used. Values are also collected from approximately 3000 laboratories worldwide and using a unique statistical analysis a value is assigned.

With each batch, a control range is provided for individual parameters and each parameter method. The control range is equivalent to the assigned mean $\pm 2S.D.$ This results in an assayed serum with extremely accurate values, which may be confidently used by laboratories to ensure the accuracy of their methods.

If an instrument specific value is not available, refer to the Mean of all Instruments section. If necessary, contact Randox Laboratories - Technical Support, Northern Ireland, tel: +44 (0) 28 9442 2413 or email Technical.Support@randox.com

NOTES

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- (1) Applies only in Germany. Ranges established according to the Guidelines of the Federal Chamber of Physicians in Germany.
- (2) Values established by reference laboratories officially recognised by the Federal Chamber of Physicians in Germany.
- (3) DGKC: German Society for Clinical Chemistry.
- (4) IFCC: International Federation of Clinical Chemistry.
- (5) SCE: Scandinavian Committee on Enzymes.

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ABBOTT AEROSET®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Albumin	g/l	40.0	34.0	46.0	3.00	6.00	Bromocresol Green
	g/dl	4.00	3.40	4.60	0.30	0.60	
ALT (GPT)	U/l	37	29	45	4.00	8.00	Tris buffer without P5P 37°C
AST (GOT)	U/l	36	29	43	3.50	7.00	Tris buffer without P5P 37°C
Bilirubin Direct	µmol/l	19.2	15.2	23.2	2.00	4.00	Diazo with Dichloroaniline (DCA)
	mg/dl	1.12	0.889	1.35	0.12	0.23	
Bilirubin Total	µmol/l	26.8	21.2	32.4	2.80	5.60	Diazo with Dichloroaniline (DCA)
	mg/dl	1.57	1.24	1.90	0.17	0.33	
	µmol/l	27.8	22.0	33.6	2.90	5.80	Diazo with Sulphanilic Acid
	mg/dl	1.63	1.29	1.97	0.17	0.34	
Calcium	mmol/l	2.23	2.01	2.45	0.11	0.22	Cresolphthalein complexone
	mg/dl	8.94	8.06	9.82	0.44	0.88	
	mmol/l	2.24	2.02	2.46	0.11	0.22	Arsenazo III
	mg/dl	8.98	8.10	9.86	0.44	0.88	
Cholesterol	mmol/l	4.06	3.53	4.59	0.27	0.53	Cholesterol Oxidase
	mg/dl	157	136	178	10.50	21.00	
Creatinine	µmol/l	122	97.9	146	12.05	24.10	Alkaline picrate with deproteinization
	mg/dl	1.38	1.11	1.65	0.14	0.27	
	µmol/l	115	91.8	138	11.60	23.20	Alkaline picrate no deproteinization
	mg/dl	1.30	1.04	1.56	0.13	0.26	
Glucose	mmol/l	6.30	5.36	7.24	0.47	0.94	Hexokinase
	mg/dl	114	96.6	131	8.70	17.40	

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Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Iron	µmol/l	19.1	15.6	22.6	1.75	3.50	Colorimetric without ppt.
	µg/dl	107	87.2	127	9.90	19.80	
Phosphate Inorganic	mmol/l	1.34	1.14	1.54	0.10	0.20	Phosphomolybdate UV
	mg/dl	4.15	3.53	4.77	0.31	0.62	
Potassium	mmol/l	3.96	3.65	4.27	0.16	0.31	ISE method - direct
Protein Total	g/l	61.6	49.2	74.0	6.20	12.40	Biuret reaction end point
	g/dl	6.16	4.92	7.40	0.62	1.24	
Sodium	mmol/l	141	134	148	3.50	7.00	ISE method - direct
Triglycerides	mmol/l	1.10	0.93	1.28	0.09	0.18	Lipase/GPO-PAP no correction
	mg/dl	97.4	81.9	113	7.75	15.50	
Urea	mmol/l	7.51	6.38	8.64	0.57	1.13	Urease kinetic
	mg/dl	45.1	38.3	51.9	3.40	6.80	
	mmol/l	7.57	6.43	8.71	0.57	1.14	Urease hypochlorite
	mg/dl	45.5	38.6	52.4	3.45	6.90	
	mmol/l	7.51	6.38	8.64	0.57	1.13	BUN
	mg/dl	21.1	17.9	24.3	1.60	3.20	
Uric Acid (Urate)	mmol/l	0.36	0.31	0.40	0.02	0.05	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.96	5.19	6.73	0.39	0.77	
	mmol/l	0.35	0.31	0.40	0.02	0.05	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.90	5.12	6.68	0.39	0.78	

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Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Albumin	g/l	40.4	34.4	46.4	3.00	6.00	Bromocresol Green
	g/dl	4.04	3.44	4.64	0.30	0.60	
	g/l	42.2	35.8	48.6	3.20	6.40	Bromocresol Purple
	g/dl	4.22	3.58	4.86	0.32	0.64	
Alkaline Phosphatase	U/l	168	143	193	12.50	25.00	AMP optimised to IFCC 37°C
	U/l	169	143	195	13.00	26.00	AMP optimised to NVKC/SFBC 37°C
	U/l	168	143	193	12.50	25.00	AMP non-optimised 37°C
ALT (GPT)	U/l	36	29	43	3.50	7.00	Tris buffer without P5P 37°C
AST (GOT)	U/l	35	28	42	3.50	7.00	Tris buffer without P5P 37°C
Bicarbonate	mmol/l	12.0	9.49	14.5	1.26	2.51	Enzymatic
Bile Acids	µmol/l	26.5	21.2	31.8	2.65	5.30	Enzymatic Colorimetric
Bilirubin Direct	µmol/l	21.4	16.9	25.9	2.25	4.50	Diazo with Sulphanilic Acid
	mg/dl	1.25	0.989	1.51	0.13	0.26	
	µmol/l	21.5	17.0	26.0	2.25	4.50	Diazo with Dichloroaniline (DCA)
	mg/dl	1.26	0.995	1.53	0.13	0.27	
Bilirubin Total	µmol/l	26.7	21.1	32.3	2.80	5.60	Diazo with Dichloroaniline (DCA)
	mg/dl	1.56	1.23	1.89	0.17	0.33	
	µmol/l	26.9	21.2	32.6	2.85	5.70	Diazo with Sulphanilic Acid
	mg/dl	1.57	1.24	1.90	0.17	0.33	
	µmol/l	27.0	21.4	32.6	2.80	5.60	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.58	1.25	1.91	0.17	0.33	

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		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Bilirubin Total	µmol/l	27.0	21.3	32.7	2.85	5.70	Diazonium ion
	mg/dl	1.58	1.25	1.91	0.17	0.33	
Calcium	mmol/l	2.29	2.06	2.52	0.12	0.23	Arsenazo III
	mg/dl	9.18	8.26	10.1	0.46	0.92	
Chloride	mmol/l	99.0	91.1	107	3.95	7.90	ISE indirect
Cholesterol	mmol/l	4.00	3.48	4.52	0.26	0.52	Cholesterol Oxidase
	mg/dl	154	134	174	10.00	20.00	
CK Total	U/l	216	177	255	19.50	39.00	CK-NAC substrate start (DGKC) 37°C
	U/l	210	172	248	19.00	38.00	CK-NAC (IFCC) 37°C
	U/l	211	173	249	19.00	38.00	Monothioglycerol 37°C
Creatinine	µmol/l	126	100	152	13.00	26.00	Alkaline picrate no deproteinization
	mg/dl	1.42	1.13	1.71	0.15	0.29	
	µmol/l	124	99.5	149	12.25	24.50	Randox Enzymatic UV method
	mg/dl	1.40	1.12	1.68	0.14	0.28	
	µmol/l	127	102	152	12.50	25.00	Jaffe rate blanked
	mg/dl	1.44	1.15	1.73	0.15	0.29	
Free T4	µmol/l	124	99.2	149	12.40	24.80	IDMS traceable
	mg/dl	1.40	1.12	1.68	0.14	0.28	
	pmol/l	14.9	11.1	18.7	1.90	3.80	Abbott Architect
	ng/dl	1.16	0.866	1.45	0.15	0.29	
	pg/ml	11.6	8.66	14.5	1.47	2.94	Abbott Architect
gamma-GT	U/l	56	47	65	4.50	9.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	55	47	63	4.00	8.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	54	46	62	4.00	8.00	DCL gamma glutamyl-3-carboxy-4-nitroanilide 37°C
Glucose	mmol/l	6.15	5.23	7.07	0.46	0.92	Hexokinase
	mg/dl	111	94.2	128	8.40	16.80	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Glucose	mmol/l	6.26	5.32	7.20	0.47	0.94	Glucose oxidase
	mg/dl	113	95.9	130	8.55	17.10	
HDL - Cholesterol	mmol/l	1.18	1.01	1.35	0.09	0.17	Direct HDL PPD
	mg/dl	45.5	39.0	52.0	3.25	6.50	
	mmol/l	1.21	1.03	1.39	0.09	0.18	Direct Clearance Method
	mg/dl	46.7	39.8	53.6	3.45	6.90	
	mmol/l	1.19	1.01	1.37	0.09	0.18	HDL - Ultra
	mg/dl	45.9	39.0	52.8	3.45	6.90	
Iron	µmol/l	19.2	15.7	22.7	1.75	3.50	Colorimetric with ppt.
	µg/dl	107	87.8	126	9.60	19.20	
	µmol/l	19.1	15.7	22.5	1.70	3.40	Colorimetric without ppt.
	µg/dl	107	87.8	126	9.60	19.20	
Lactate	mmol/l	1.49	1.22	1.76	0.14	0.27	Colorimetric Lactate Oxidase
	mg/dl	13.4	11.0	15.8	1.20	2.40	
LD (LDH)	U/l	264	224	304	20.00	40.00	L->P 37°C
	U/l	263	223	303	20.00	40.00	L->P IFCC 37°C
Lipase	U/l	37	30	44	3.50	7.00	Other Colorimetric 37°C
Lithium	mmol/l	1.04	0.91	1.17	0.06	0.13	Spectrophotometric
	mg/dl	0.722	0.633	0.811	0.04	0.09	
Magnesium	mmol/l	0.91	0.80	1.02	0.06	0.11	Arsenazo III
	mg/dl	2.22	1.95	2.49	0.14	0.27	
	mmol/l	0.90	0.79	1.01	0.05	0.11	Calmagite
	mg/dl	2.18	1.92	2.44	0.13	0.26	
	mmol/l	0.91	0.80	1.02	0.05	0.11	Xylidyl Blue
	mg/dl	2.21	1.94	2.48	0.14	0.27	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Magnesium	mmol/l	0.88	0.78	0.99	0.05	0.11	Enzymatic
	mg/dl	2.15	1.89	2.41	0.13	0.26	
Osmolality	mOsm/kg	302	242	362	30.00	60.00	Calculated
Phosphate Inorganic	mmol/l	1.37	1.16	1.58	0.11	0.21	Phosphomolybdate enzymatic
	mg/dl	4.25	3.60	4.90	0.33	0.65	
	mmol/l	1.36	1.16	1.56	0.10	0.20	Phosphomolybdate UV
	mg/dl	4.22	3.60	4.84	0.31	0.62	
Potassium	mmol/l	3.95	3.63	4.27	0.16	0.32	ISE method - indirect
Protein Total	g/l	60.7	48.6	72.8	6.05	12.10	Biuret reaction end point
	g/dl	6.07	4.86	7.28	0.61	1.21	
	g/l	60.8	48.6	73.0	6.10	12.20	Biuret reaction kinetic
	g/dl	6.08	4.86	7.30	0.61	1.22	
PSA Total	ng/ml =	11.3	8.47	14.1	1.42	2.83	Abbott Architect
Sodium	mmol/l	143	135	151	4.00	8.00	ISE method - indirect
Thyroid Stimulating Hormone	µU/ml =	1.22	0.98	1.46	0.12	0.24	Abbott Architect
TIBC	µmol/l	43.3	34.2	52.4	4.55	9.10	FE+UIBC(saturation with iron)
	µg/dl	242	191	293	25.50	51.00	
Total T3	nmol/l	2.45	1.84	3.06	0.31	0.61	Abbott Architect
	ng/ml	1.59	1.20	1.98	0.20	0.39	
	ng/dl	159	120	198	19.50	39.00	Abbott Architect
Triglycerides	mmol/l	1.07	0.90	1.24	0.09	0.17	Lipase/GPO-PAP no correction
	mg/dl	94.7	79.3	110	7.70	15.40	
	mmol/l	1.06	0.89	1.23	0.09	0.17	Lipase/GPO-PAP 0.11mmol/l correction
	mg/dl	93.8	78.6	109	7.60	15.20	

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Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Triglycerides	mmol/l	1.06	0.89	1.23	0.08	0.17	L/G Kinase EP. no correction
	mg/dl	93.8	78.9	109	7.45	14.90	
	mmol/l	1.08	0.91	1.25	0.09	0.17	Lipase/Glycerol Dehydrogenase
	mg/dl	95.6	80.2	111	7.70	15.40	
Urea	mmol/l	7.60	6.46	8.74	0.57	1.14	Urease end point
	mg/dl	45.7	38.8	52.6	3.45	6.90	
	mmol/l	7.40	6.29	8.51	0.56	1.11	Urease kinetic
	mg/dl	44.5	37.8	51.2	3.35	6.70	
	mmol/l	7.40	6.29	8.51	0.56	1.11	BUN
Uric Acid (Urate)	mg/dl	20.8	17.7	23.9	1.55	3.10	
	mmol/l	0.35	0.30	0.39	0.02	0.05	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.85	5.07	6.63	0.39	0.78	
	mmol/l	0.35	0.30	0.39	0.02	0.05	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.83	5.07	6.59	0.38	0.76	
	mmol/l	0.34	0.30	0.39	0.02	0.04	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.75	5.01	6.49	0.37	0.74	

ABX Pentra 400®

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Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Albumin	g/l	41.0	34.8	47.2	3.10	6.20	Bromocresol Green
	g/dl	4.10	3.48	4.72	0.31	0.62	
Alkaline Phosphatase	U/l	165	140	190	12.50	25.00	AMP optimised to IFCC 37°C
ALT (GPT)	U/l	41	33	49	4.00	8.00	Tris buffer without P5P 37°C
Bilirubin Direct	µmol/l	22.8	18.0	27.6	2.40	4.80	Diazo with Dichloroaniline (DCA)
	mg/dl	1.33	1.05	1.61	0.14	0.28	
Bilirubin Total	µmol/l	26.3	20.8	31.8	2.75	5.50	Diazo with Dichloroaniline (DCA)
	mg/dl	1.54	1.22	1.86	0.16	0.32	
Calcium	mmol/l	2.21	1.99	2.43	0.11	0.22	Cresolphthalein complexone
	mg/dl	8.86	7.98	9.74	0.44	0.88	
Chloride	mmol/l	95.5	87.9	103	3.80	7.60	ISE direct
Cholesterol	mmol/l	4.09	3.56	4.62	0.27	0.53	Cholesterol Oxidase
	mg/dl	158	137	179	10.50	21.00	
CK Total	U/l	209	171	247	19.00	38.00	CK-NAC (IFCC) 37°C
Creatinine	µmol/l	124	99.5	149	12.25	24.50	Jaffe rate blanked
	mg/dl	1.40	1.12	1.68	0.14	0.28	
gamma-GT	U/l	56	48	64	4.00	8.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
Glucose	mmol/l	6.32	5.37	7.27	0.48	0.95	Glucose oxidase
	mg/dl	114	96.8	131	8.60	17.20	
Iron	µmol/l	18.5	15.1	21.9	1.70	3.40	Colorimetric without ppt.
	µg/dl	103	84.4	122	9.30	18.60	

ABX Pentra 400®

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Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Phosphate Inorganic	mmol/l	1.53	1.30	1.76	0.12	0.23	Phosphomolybdate UV
	mg/dl	4.74	4.03	5.45	0.36	0.71	
Potassium	mmol/l	3.80	3.49	4.11	0.16	0.31	ISE method - direct
Protein Total	g/l	62.0	49.6	74.4	6.20	12.40	Biuret reaction end point
	g/dl	6.20	4.96	7.44	0.62	1.24	
Sodium	mmol/l	136	130	142	3.00	6.00	ISE method - direct
Urea	mmol/l	7.06	6.00	8.12	0.53	1.06	Urease end point
	mg/dl	42.4	36.1	48.7	3.15	6.30	
	mmol/l	7.06	6.00	8.12	0.53	1.06	BUN
	mg/dl	19.8	16.8	22.8	1.50	3.00	
Uric Acid (Urate)	mmol/l	0.33	0.29	0.37	0.02	0.04	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.56	4.84	6.28	0.36	0.72	

Beckman Coulter AU400/500/600/800®

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Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Albumin	g/l	41.0	34.8	47.2	3.10	6.20	Bromocresol Green
	g/dl	4.10	3.48	4.72	0.31	0.62	
Alkaline Phosphatase	U/l	195	165	225	15.00	30.00	p-Nitrophenylphosphate AMP 37°C
	U/l	293	249	337	22.00	44.00	Diethanolamine buffer DEA 37°C
	U/l	201	171	231	15.00	30.00	AMP optimised to IFCC 37°C
ALT (GPT)	U/l	39	31	47	4.00	8.00	Tris buffer without P5P 37°C
Amylase Total	U/l	80	68	92	6.00	12.00	Beckman Coulter - blocked pNPG7 37°C
AST (GOT)	U/l	38	31	45	3.50	7.00	Tris buffer without P5P 37°C
Bicarbonate	mmol/l	13.1	10.4	15.8	1.35	2.70	Enzymatic
Bilirubin Direct	µmol/l	21.7	17.1	26.3	2.30	4.60	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.27	1.00	1.54	0.14	0.27	
Bilirubin Total	µmol/l	28.8	22.8	34.8	3.00	6.00	Diazo with Sulphanilic Acid
	mg/dl	1.68	1.33	2.03	0.18	0.35	
	µmol/l	30.7	24.2	37.2	3.25	6.50	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.80	1.42	2.18	0.19	0.38	
	µmol/l	32.3	25.5	39.1	3.40	6.80	Oxidation to Biliverdin
	mg/dl	1.89	1.49	2.29	0.20	0.40	
Calcium	mmol/l	2.23	2.01	2.45	0.11	0.22	Cresolphthalein complexone
	mg/dl	8.94	8.06	9.82	0.44	0.88	
	mmol/l	2.30	2.07	2.53	0.12	0.23	Arsenazo III
	mg/dl	9.22	8.30	10.1	0.46	0.92	

Beckman Coulter AU400/500/600/800®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Chloride	mmol/l	97.5	89.7	105	3.90	7.80	ISE indirect
Cholesterol	mmol/l	4.12	3.59	4.65	0.27	0.53	Cholesterol Oxidase
	mg/dl	159	139	179	10.00	20.00	
CK Total	U/l	218	178	258	20.00	40.00	CK-NAC serum start (DGKC) 37°C
	U/l	218	178	258	20.00	40.00	CK-NAC substrate start (DGKC) 37°C
	U/l	220	180	260	20.00	40.00	CK-NAC (IFCC) 37°C
Creatinine	µmol/l	131	105	157	13.00	26.00	Alkaline picrate no deproteinization
	mg/dl	1.48	1.19	1.77	0.15	0.29	
	µmol/l	130	104	156	13.00	26.00	Roche Creatinine Plus
	mg/dl	1.47	1.18	1.76	0.15	0.29	
	µmol/l	130	104	156	13.00	26.00	Jaffe rate blanked
	mg/dl	1.47	1.18	1.76	0.15	0.29	
	µmol/l	129	103	155	13.00	26.00	Jaffe rate blanked comp. (-26 µmol/l)
	mg/dl	1.46	1.16	1.76	0.15	0.30	
	µmol/l	118	94.1	142	11.95	23.90	Jaffe rate blanked compensated (-18 µmol/l)
	mg/dl	1.33	1.06	1.60	0.14	0.27	
	µmol/l	117	93.4	141	11.80	23.60	IDMS traceable
	mg/dl	1.32	1.06	1.58	0.13	0.26	
D-3-Hydroxybutyrate	mmol/l	0.29	0.25	0.34	0.02	0.04	Tris buffer 100mmol pH 8.5
gamma-GT	U/l	58	49	67	4.50	9.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	57	49	65	4.00	8.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
GLDH	U/l	16	13	19	1.50	3.00	Triethanolamine buffer 50 mmol 37°C
Glucose	mmol/l	6.27	5.33	7.21	0.47	0.94	Hexokinase
	mg/dl	113	96.0	130	8.50	17.00	
	mmol/l	6.41	5.45	7.37	0.48	0.96	Glucose oxidase
	mg/dl	116	98.2	134	8.90	17.80	

Beckman Coulter AU400/500/600/800®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
HDL - Cholesterol	mmol/l	1.18	1.01	1.35	0.09	0.17	Direct HDL PPD
	mg/dl	45.5	39.0	52.0	3.25	6.50	
	mmol/l	1.15	0.98	1.32	0.09	0.17	Direct HDL Immunoseparation
	mg/dl	44.4	37.8	51.0	3.30	6.60	
	mmol/l	1.13	0.96	1.30	0.09	0.17	Direct Clearance Method
	mg/dl	43.6	37.0	50.2	3.30	6.60	
Iron	mmol/l	1.06	0.90	1.22	0.08	0.16	Direct HDL Roche 3rd generation
	mg/dl	40.9	34.6	47.2	3.15	6.30	
	µmol/l	19.2	15.8	22.6	1.70	3.40	Colorimetric with ppt.
	µg/dl	107	88.3	126	9.35	18.70	
Lactate	µmol/l	19.4	15.9	22.9	1.75	3.50	Colorimetric without ppt.
	µg/dl	108	88.9	127	9.55	19.10	
	mmol/l	1.46	1.20	1.72	0.13	0.26	Colorimetric Lactate Oxidase
	mg/dl	13.2	10.8	15.6	1.20	2.40	
LD (LDH)	U/l	261	222	300	19.50	39.00	L->P 37°C
	U/l	467	397	537	35.00	70.00	P->L Scandinavian & Dutch 37°C
	U/l	392	334	450	29.00	58.00	P->L German methods 37°C
	U/l	404	343	465	30.50	61.00	P->L SFBC 37°C
	U/l	253	215	291	19.00	38.00	L->P IFCC 37°C
Lipase	U/l	37	29	45	4.00	8.00	Other Colorimetric 37°C
	U/l	34	27	41	3.50	7.00	Roche Colorimetric 37°C
Lithium	mmol/l	0.95	0.84	1.07	0.06	0.11	Spectrophotometric
	mg/dl	0.660	0.581	0.739	0.04	0.08	
Magnesium	mmol/l	0.91	0.80	1.02	0.05	0.11	Xylidyl Blue
	mg/dl	2.21	1.94	2.48	0.14	0.27	

Beckman Coulter AU400/500/600/800®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Phosphate Inorganic	mmol/l	1.39	1.18	1.60	0.11	0.21	Phosphomolybdate enzymatic
	mg/dl	4.31	3.66	4.96	0.33	0.65	
	mmol/l	1.35	1.15	1.55	0.10	0.20	Phosphomolybdate UV
	mg/dl	4.19	3.57	4.81	0.31	0.62	
Potassium	mmol/l	4.01	3.69	4.33	0.16	0.32	ISE method - indirect
Protein Total	g/l	60.0	48.0	72.0	6.00	12.00	Biuret reaction end point
	g/dl	6.00	4.80	7.20	0.60	1.20	
Sodium	mmol/l	142	135	149	3.50	7.00	ISE method - indirect
TIBC	µmol/l	44.2	34.9	53.5	4.65	9.30	FE+UIBC(saturation with iron)
	µg/dl	247	195	299	26.00	52.00	
Triglycerides	mmol/l	1.15	0.97	1.34	0.09	0.19	Lipase/GPO-PAP no correction
	mg/dl	102	85.4	119	8.30	16.60	
	mmol/l	1.15	0.97	1.33	0.09	0.18	Lipase/GPO-PAP 0.11mmol/l correction
	mg/dl	102	85.5	119	8.25	16.50	
	mmol/l	1.14	0.96	1.32	0.09	0.18	L/G Kinase EP. no correction
	mg/dl	101	84.9	117	8.05	16.10	
Urea	mmol/l	7.52	6.39	8.65	0.57	1.13	Urease end point
	mg/dl	45.2	38.4	52.0	3.40	6.80	
	mmol/l	7.42	6.31	8.53	0.56	1.11	Urease kinetic
	mg/dl	44.6	37.9	51.3	3.35	6.70	
	mmol/l	7.42	6.31	8.53	0.56	1.11	BUN
	mg/dl	20.8	17.7	23.9	1.55	3.10	
Uric Acid (Urate)	mmol/l	0.34	0.30	0.39	0.02	0.05	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.76	5.01	6.51	0.38	0.75	

Beckman Coulter AU400/500/600/800®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Range

Analyte	unit	target	low	high	1SD	2SD	methods
Uric Acid (Urate)	mmol/l	0.35	0.30	0.40	0.02	0.05	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.86	5.09	6.63	0.39	0.77	
	mmol/l	0.34	0.29	0.38	0.02	0.04	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.64	4.91	6.37	0.37	0.73	

Beckman CX4/5/7/9/LX20®/DxC600/800®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Albumin	g/l	42.4	36.1	48.7	3.15	6.30	Bromocresol Green
	g/dl	4.24	3.61	4.87	0.32	0.63	
	g/l	43.2	36.7	49.7	3.25	6.50	Bromocresol Purple
	g/dl	4.32	3.67	4.97	0.33	0.65	
Alkaline Phosphatase	U/l	173	147	199	13.00	26.00	p-Nitrophenylphosphate AMP 37°C
	U/l	135	115	155	10.00	20.00	p-Nitrophenylphosphate AMP 30°C
	U/l	182	154	210	14.00	28.00	AMP optimised to IFCC 37°C
	U/l	142	120	164	11.00	22.00	AMP optimised to IFCC 30°C
	U/l	167	142	192	12.50	25.00	AMP reduced interference 37°C
	U/l	130	111	149	9.50	19.00	AMP reduced interference 30°C
ALT (GPT)	U/l	36	29	43	3.50	7.00	Tris buffer without P5P 37°C
	U/l	27	21	33	3.00	6.00	Tris buffer without P5P 30°C
	U/l	36	29	43	3.50	7.00	Tris buffer SCE 37°C
	U/l	27	21	33	3.00	6.00	Tris buffer SCE 30°C
Amylase Pancreatic	U/l	50	43	57	3.50	7.00	Immunoinhibition EPS substrate 37°C
	U/l	50	43	57	3.50	7.00	Beckman Synchron/CX/LXi/DxC 37°C
Amylase Total	U/l	87	74	100	6.50	13.00	Beckman maltotetraose 37°C
	U/l	82	70	94	6.00	12.00	Roche liquid stable pNPG7 37°C
	U/l	85	73	97	6.00	12.00	Beckman Synchron AMY7 37°C
AST (GOT)	U/l	34	28	40	3.00	6.00	Tris buffer without P5P 37°C
	U/l	23	19	27	2.00	4.00	Tris buffer without P5P 30°C

Beckman CX4/5/7/9/LX20®/DxC600/800®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
AST (GOT)	U/l	34	27	41	3.50	7.00	Tris buffer SCE 37°C
	U/l	23	18	28	2.50	5.00	Tris buffer SCE 30°C
Bicarbonate	mmol/l	13.4	10.6	16.2	1.40	2.80	Differential rate pH change
	mmol/l	13.7	10.8	16.6	1.45	2.90	Ion selective electrode
Bilirubin Direct	µmol/l	14.9	11.8	18.0	1.55	3.10	Diazo with Sulphanilic Acid
	mg/dl	0.872	0.690	1.05	0.09	0.18	
Bilirubin Total	µmol/l	29.8	23.6	36.0	3.10	6.20	Diazo with Sulphanilic Acid
	mg/dl	1.74	1.38	2.10	0.18	0.36	
Calcium	mmol/l	2.20	1.98	2.42	0.11	0.22	Ion selective electrode
	mg/dl	8.82	7.94	9.70	0.44	0.88	
	mmol/l	2.26	2.03	2.49	0.12	0.23	Arsenazo III
	mg/dl	9.06	8.14	9.98	0.46	0.92	
Chloride	mmol/l	98.9	91.0	107	3.95	7.90	ISE indirect
Cholesterol	mmol/l	3.83	3.33	4.33	0.25	0.50	Cholesterol Oxidase
	mg/dl	148	129	167	9.50	19.00	
Cholinesterase	U/l	6083	4867	7299	608.00	1216.00	Colorimetric Butyrylthiocholine 37°C
CK Total	U/l	204	168	240	18.00	36.00	CK-NAC serum start (DGKC) 37°C
	U/l	128	105	151	11.50	23.00	CK-NAC serum start (DGKC) 30°C
	U/l	213	175	251	19.00	38.00	CK-NAC (IFCC) 37°C
	U/l	133	110	156	11.50	23.00	CK-NAC (IFCC) 30°C
	U/l	214	176	252	19.00	38.00	Monothioglycerol 37°C
	U/l	134	110	158	12.00	24.00	Monothioglycerol 30°C
Creatinine	µmol/l	123	98.1	148	12.45	24.90	Alkaline picrate no deproteinization
	mg/dl	1.39	1.11	1.67	0.14	0.28	
	µmol/l	123	98.8	147	12.10	24.20	Randox Enzymatic UV method
	mg/dl	1.39	1.12	1.66	0.14	0.27	

Beckman CX4/5/7/9/LX20®/DxC600/800®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Creatinine	μmol/l	124	99.6	148	12.20	24.40	Jaffe rate blanked
	mg/dl	1.40	1.13	1.67	0.14	0.27	
	μmol/l	122	97.7	146	12.15	24.30	IDMS traceable
	mg/dl	1.38	1.10	1.66	0.14	0.28	
gamma-GT	U/l	45	38	52	3.50	7.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	35	30	40	2.50	5.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	44	38	50	3.00	6.00	Gamma glutamyl-4-nitroanilide 37°C
	U/l	35	30	40	2.50	5.00	Gamma glutamyl-4-nitroanilide 30°C
Glucose	mmol/l	6.06	5.15	6.97	0.46	0.91	Hexokinase
	mg/dl	109	92.8	125	8.10	16.20	
	mmol/l	6.12	5.20	7.04	0.46	0.92	Oxygen electrode
	mg/dl	110	93.7	126	8.15	16.30	
	mmol/l	5.99	5.09	6.89	0.45	0.90	Glucose oxidase
	mg/dl	108	91.7	124	8.15	16.30	
HDL - Cholesterol	mmol/l	1.34	1.14	1.54	0.10	0.20	Direct HDL PPD
	mg/dl	51.7	44.0	59.4	3.85	7.70	
Iron	μmol/l	19.2	15.8	22.6	1.70	3.40	Colorimetric without ppt.
	μg/dl	107	88.3	126	9.35	18.70	
Lactate	mmol/l	1.50	1.23	1.77	0.14	0.27	Colorimetric Lactate Oxidase
	mg/dl	13.5	11.1	15.9	1.20	2.40	
LD (LDH)	U/l	227	193	261	17.00	34.00	L->P 37°C
	U/l	164	139	189	12.50	25.00	L->P 30°C
	U/l	583	495	671	44.00	88.00	Pyruvate 1.4 mM - Beckman LD-P 37°C
	U/l	421	357	485	32.00	64.00	Pyruvate 1.4 mM - Beckman LD-P 30°C

Beckman CX4/5/7/9/LX20®/DxC600/800®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Range

Analyte	unit	target	low	high	1SD	2SD	methods
LD (LDH)	U/l	249	212	286	18.50	37.00	L->P IFCC 37°C
	U/l	180	153	207	13.50	27.00	L->P IFCC 30°C
Lipase	U/l	34	27	41	3.50	7.00	Other Colorimetric 37°C
Lithium	mmol/l	0.97	0.85	1.09	0.06	0.12	Spectrophotometric
	mg/dl	0.674	0.593	0.755	0.04	0.08	
Magnesium	mmol/l	0.91	0.80	1.02	0.06	0.11	Calmagite
	mg/dl	2.22	1.95	2.49	0.14	0.27	
	mmol/l	0.91	0.80	1.01	0.05	0.11	Xylidyl Blue
	mg/dl	2.20	1.94	2.46	0.13	0.26	
Osmolality	mOsm/kg	286	229	343	28.50	57.00	Calculated
Phosphate Inorganic	mmol/l	1.36	1.16	1.56	0.10	0.20	Phosphomolybdate enzymatic
	mg/dl	4.22	3.60	4.84	0.31	0.62	
	mmol/l	1.36	1.16	1.56	0.10	0.20	Phosphomolybdate UV
	mg/dl	4.22	3.60	4.84	0.31	0.62	
Potassium	mmol/l	3.95	3.63	4.27	0.16	0.32	ISE method - indirect
Protein Total	g/l	59.2	47.4	71.0	5.90	11.80	Biuret reaction CX4/5/7
	g/dl	5.92	4.74	7.10	0.59	1.18	
	g/l	59.8	47.8	71.8	6.00	12.00	Biuret reaction end point
	g/dl	5.98	4.78	7.18	0.60	1.20	
	g/l	57.5	46.0	69.0	5.75	11.50	Biuret reaction kinetic
	g/dl	5.75	4.60	6.90	0.58	1.15	
Sodium	mmol/l	142	135	149	3.50	7.00	ISE method - indirect
TIBC	µmol/l	44.5	35.1	53.9	4.70	9.40	Removal of excess free iron
	µg/dl	249	196	302	26.50	53.00	
	µmol/l	43.6	34.5	52.7	4.55	9.10	FE+UIBC(saturation with iron)
	µg/dl	244	193	295	25.50	51.00	

Beckman CX4/5/7/9/LX20®/DxC600/800®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Triglycerides	mmol/l	1.16	0.98	1.34	0.09	0.18	Lipase/GPO-PAP no correction
	mg/dl	103	86.5	120	8.25	16.50	
	mmol/l	1.18	0.99	1.37	0.10	0.19	L/G Kinase EP. no correction
	mg/dl	104	87.4	121	8.30	16.60	
Urea	mmol/l	7.70	6.54	8.86	0.58	1.16	Urease end point
	mg/dl	46.3	39.3	53.3	3.50	7.00	
	mmol/l	7.58	6.44	8.72	0.57	1.14	Urease kinetic
	mg/dl	45.6	38.7	52.5	3.45	6.90	
	mmol/l	7.58	6.44	8.72	0.57	1.14	BUN
	mg/dl	21.3	18.1	24.5	1.60	3.20	
Uric Acid (Urate)	mmol/l	0.33	0.29	0.37	0.02	0.04	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.49	4.79	6.19	0.35	0.70	

BIOSYSTEMS A15

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Albumin	g/l	38.8	33.0	44.6	2.90	5.80	Bromocresol Green
	g/dl	3.88	3.30	4.46	0.29	0.58	
Alkaline Phosphatase	U/l	175	149	201	13.00	26.00	AMP optimised to IFCC 37°C
	U/l	136	116	156	10.00	20.00	AMP optimised to IFCC 30°C
	U/l	112	95	129	8.50	17.00	AMP optimised to IFCC 25°C
ALT (GPT)	U/l	42	34	50	4.00	8.00	Tris buffer without P5P 37°C
	U/l	31	25	37	3.00	6.00	Tris buffer without P5P 30°C
	U/l	24	19	29	2.50	5.00	Tris buffer without P5P 25°C
AST (GOT)	U/l	41	33	49	4.00	8.00	Tris buffer without P5P 37°C
	U/l	28	22	34	3.00	6.00	Tris buffer without P5P 30°C
	U/l	20	16	24	2.00	4.00	Tris buffer without P5P 25°C
Bilirubin Total	µmol/l	33.9	26.8	41.0	3.55	7.10	Diazo with Sulphanilic Acid
	mg/dl	1.98	1.57	2.39	0.21	0.41	
Cholesterol	mmol/l	4.01	3.49	4.53	0.26	0.52	Cholesterol Oxidase
	mg/dl	155	135	175	10.00	20.00	
Creatinine	µmol/l	125	100	150	12.50	25.00	Alkaline picrate no deproteinization
	mg/dl	1.41	1.13	1.69	0.14	0.28	
Glucose	mmol/l	6.44	5.48	7.40	0.48	0.96	Glucose oxidase
	mg/dl	116	98.7	133	8.65	17.30	
Protein Total	g/l	61.5	49.2	73.8	6.15	12.30	Biuret reaction end point
	g/dl	6.15	4.92	7.38	0.62	1.23	

BIOSYSTEMS A15

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Triglycerides	mmol/l	1.15	0.96	1.34	0.09	0.19	Lipase/GPO-PAP no correction
	mg/dl	102	85.3	119	8.35	16.70	
Urea	mmol/l	7.48	6.36	8.60	0.56	1.12	Urease kinetic
	mg/dl	45.0	38.2	51.8	3.40	6.80	
	mmol/l	7.48	6.36	8.60	0.56	1.12	BUN
	mg/dl	21.0	17.9	24.1	1.55	3.10	
Uric Acid (Urate)	mmol/l	0.38	0.33	0.43	0.02	0.05	Uricase peroxidase no ascorbate oxidase
	mg/dl	6.32	5.49	7.15	0.42	0.83	

BIOSYSTEMS A25

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Albumin	g/l	40.7	34.6	46.8	3.05	6.10	Bromocresol Green
	g/dl	4.07	3.46	4.68	0.31	0.61	
ALT (GPT)	U/l	40	32	48	4.00	8.00	Tris buffer without P5P 37°C
	U/l	30	24	36	3.00	6.00	Tris buffer without P5P 30°C
	U/l	23	18	28	2.50	5.00	Tris buffer without P5P 25°C
AST (GOT)	U/l	39	32	46	3.50	7.00	Tris buffer without P5P 37°C
	U/l	26	22	30	2.00	4.00	Tris buffer without P5P 30°C
	U/l	19	15	23	2.00	4.00	Tris buffer without P5P 25°C
Bilirubin Total	µmol/l	32.7	25.8	39.6	3.45	6.90	Diazo with Sulphanilic Acid
	mg/dl	1.91	1.51	2.31	0.20	0.40	
Calcium	mmol/l	2.34	2.11	2.57	0.12	0.23	Arsenazo III
	mg/dl	9.38	8.46	10.3	0.46	0.92	
Cholesterol	mmol/l	4.13	3.59	4.67	0.27	0.54	Cholesterol Oxidase
	mg/dl	159	139	179	10.00	20.00	
CK Total	U/l	220	180	260	20.00	40.00	CK-NAC (IFCC) 37°C
	U/l	138	113	163	12.50	25.00	CK-NAC (IFCC) 30°C
	U/l	94	77	111	8.50	17.00	CK-NAC (IFCC) 25°C
Creatinine	µmol/l	118	94.5	142	11.75	23.50	Alkaline picrate no deproteinization
	mg/dl	1.33	1.07	1.59	0.13	0.26	
Glucose	mmol/l	6.33	5.38	7.28	0.48	0.95	Glucose oxidase
	mg/dl	114	96.9	131	8.55	17.10	

BIOSYSTEMS A25

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Protein Total	g/l	61.4	49.1	73.7	6.15	12.30	Biuret reaction end point
	g/dl	6.14	4.91	7.37	0.62	1.23	
Triglycerides	mmol/l	1.21	1.02	1.40	0.10	0.19	Lipase/GPO-PAP no correction
	mg/dl	107	90.3	124	8.35	16.70	
Urea	mmol/l	7.68	6.53	8.83	0.58	1.15	Urease kinetic
	mg/dl	46.2	39.2	53.2	3.50	7.00	
	mmol/l	7.68	6.53	8.83	0.58	1.15	BUN
	mg/dl	21.6	18.4	24.8	1.60	3.20	
Uric Acid (Urate)	mmol/l	0.36	0.32	0.41	0.02	0.05	Uricase peroxidase with ascorbate oxidase
	mg/dl	6.10	5.29	6.91	0.41	0.81	
	mmol/l	0.35	0.30	0.39	0.02	0.05	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.85	5.09	6.61	0.38	0.76	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Albumin	g/l	43.8	37.2	50.4	3.30	6.60	Bromocresol Green
	g/dl	4.38	3.72	5.04	0.33	0.66	
	g/l	41.9	35.6	48.2	3.15	6.30	Bromocresol Purple
	g/dl	4.19	3.56	4.82	0.32	0.63	
Alkaline Phosphatase	U/l	135	115	155	10.00	20.00	Roche Integra AMP buffer 37°C
	U/l	105	90	120	7.50	15.00	Roche Integra AMP buffer 30°C
	U/l	86	73	99	6.50	13.00	Roche Integra AMP buffer 25°C
	U/l	135	115	155	10.00	20.00	AMP optimised to IFCC 37°C
	U/l	105	90	120	7.50	15.00	AMP optimised to IFCC 30°C
	U/l	86	73	99	6.50	13.00	AMP optimised to IFCC 25°C
ALT (GPT)	U/l	34	27	41	3.50	7.00	Tris buffer without P5P 37°C
	U/l	25	20	30	2.50	5.00	Tris buffer without P5P 30°C
	U/l	19	15	23	2.00	4.00	Tris buffer without P5P 25°C
Amylase Pancreatic	U/l	61	52	70	4.50	9.00	Randox EPS Liquid and BM/Roche EPS Liquid 37°C
Amylase Total	U/l	83	70	96	6.50	13.00	Saccharogenic 37°C
	U/l	83	70	96	6.50	13.00	Roche Integra 2-chloro-pNPG7 37°C
	U/l	83	71	95	6.00	12.00	Roche liquid stable pNPG7 37°C
AST (GOT)	U/l	35	28	42	3.50	7.00	Tris buffer without P5P 37°C
	U/l	24	19	29	2.50	5.00	Tris buffer without P5P 30°C
	U/l	17	13	21	2.00	4.00	Tris buffer without P5P 25°C
Bicarbonate	mmol/l	13.4	10.6	16.2	1.40	2.80	Enzymatic

COBAS INTEGRA®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry 2017-01

Range

Analyte	unit	target	low	high	1SD	2SD	methods
Bilirubin Direct	µmol/l	21.2	16.7	25.7	2.25	4.50	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.24	0.977	1.50	0.13	0.26	
Bilirubin Total	µmol/l	25.3	20.0	30.6	2.65	5.30	Diazo with Sulphanilic Acid
	mg/dl	1.48	1.17	1.79	0.16	0.31	
	µmol/l	25.5	20.1	30.9	2.70	5.40	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.49	1.18	1.80	0.16	0.31	
	µmol/l	24.9	19.7	30.1	2.60	5.20	Diazonium ion
	mg/dl	1.46	1.15	1.77	0.16	0.31	
Calcium	mmol/l	2.29	2.06	2.52	0.12	0.23	Cresolphthalein complexone
	mg/dl	9.18	8.26	10.1	0.46	0.92	
	mmol/l	2.25	2.02	2.48	0.12	0.23	NM-BAPTA
	mg/dl	9.02	8.10	9.94	0.46	0.92	
Chloride	mmol/l	98.3	90.4	106	3.95	7.90	ISE indirect
Cholesterol	mmol/l	4.10	3.56	4.64	0.27	0.54	Cholesterol Oxidase
	mg/dl	158	137	179	10.50	21.00	
CK Total	U/l	224	184	264	20.00	40.00	CK-NAC (IFCC) 37°C
	U/l	140	115	165	12.50	25.00	CK-NAC (IFCC) 30°C
	U/l	95	78	112	8.50	17.00	CK-NAC (IFCC) 25°C
Creatinine	µmol/l	116	93.1	139	11.45	22.90	Alkaline picrate no deproteinization
	mg/dl	1.31	1.05	1.57	0.13	0.26	
	µmol/l	118	94.5	142	11.75	23.50	Roche Creatinine Plus
	mg/dl	1.33	1.07	1.59	0.13	0.26	
	µmol/l	119	95.1	143	11.95	23.90	Jaffe rate blanked
	mg/dl	1.34	1.07	1.61	0.14	0.27	
	µmol/l	121	96.6	145	12.20	24.40	Jaffe rate blanked comp. (-26 µmol/l)
	mg/dl	1.37	1.09	1.65	0.14	0.28	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Creatinine	μmol/l	118	94.2	142	11.90	23.80	Jaffe rate blanked compensated (-18 μmol/l)
	mg/dl	1.33	1.06	1.60	0.14	0.27	
gamma-GT	U/l	51	44	58	3.50	7.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	40	35	45	2.50	5.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	31	27	35	2.00	4.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C
	U/l	57	48	66	4.50	9.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	45	38	52	3.50	7.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	35	30	40	2.50	5.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
Glucose	mmol/l	6.08	5.16	7.00	0.46	0.92	Glucose dehydrogenase
	mg/dl	110	93.0	127	8.50	17.00	
	mmol/l	6.28	5.34	7.22	0.47	0.94	Hexokinase
	mg/dl	113	96.2	130	8.40	16.80	
	mmol/l	6.32	5.37	7.27	0.48	0.95	Glucose oxidase
	mg/dl	114	96.8	131	8.60	17.20	
Iron	μmol/l	19.8	16.2	23.4	1.80	3.60	Colorimetric with ppt.
	μg/dl	111	90.6	131	10.20	20.40	
	μmol/l	20.0	16.4	23.6	1.80	3.60	Colorimetric without ppt.
	μg/dl	112	91.7	132	10.15	20.30	
LD (LDH)	U/l	363	309	417	27.00	54.00	P->L German methods 37°C
	U/l	262	223	301	19.50	39.00	P->L German methods 30°C
	U/l	184	157	211	13.50	27.00	P->L German methods 25°C
	U/l	250	212	288	19.00	38.00	L->P IFCC 37°C
	U/l	181	153	209	14.00	28.00	L->P IFCC 30°C
	U/l	127	107	147	10.00	20.00	L->P IFCC 25°C

COBAS INTEGRA®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Lipase	U/l	37	29	45	4.00	8.00	Roche Colorimetric 37°C
Lithium	mmol/l	0.97	0.85	1.09	0.06	0.12	Ion selective electrode
	mg/dl	0.673	0.592	0.754	0.04	0.08	
Magnesium	mmol/l	0.90	0.79	1.01	0.05	0.11	Xylidyl Blue
	mg/dl	2.19	1.92	2.46	0.14	0.27	
	mmol/l	0.91	0.80	1.02	0.05	0.11	Chlorphosphonazo III
	mg/dl	2.21	1.95	2.47	0.13	0.26	
Phosphate Inorganic	mmol/l	1.40	1.19	1.61	0.11	0.21	Phosphomolybdate enzymatic
	mg/dl	4.34	3.69	4.99	0.33	0.65	
	mmol/l	1.41	1.19	1.63	0.11	0.22	Phosphomolybdate UV
	mg/dl	4.37	3.69	5.05	0.34	0.68	
Potassium	mmol/l	4.00	3.68	4.32	0.16	0.32	ISE method - indirect
Protein Total	g/l	58.4	46.7	70.1	5.85	11.70	Biuret reaction end point
	g/dl	5.84	4.67	7.01	0.59	1.17	
	g/l	58.8	47.0	70.6	5.90	11.80	Biuret reaction kinetic
	g/dl	5.88	4.70	7.06	0.59	1.18	
Sodium	mmol/l	141	134	148	3.50	7.00	ISE method - indirect
TIBC	µmol/l	42.4	33.5	51.3	4.45	8.90	FE+UIBC(saturation with iron)
	µg/dl	237	187	287	25.00	50.00	
Triglycerides	mmol/l	1.10	0.92	1.28	0.09	0.18	Lipase/GPO-PAP no correction
	mg/dl	97.4	81.8	113	7.80	15.60	
	mmol/l	1.13	0.95	1.31	0.09	0.18	Lipase/GPO-PAP 0.11mmol/l correction
	mg/dl	100	84.3	116	7.85	15.70	
	mmol/l	1.10	0.92	1.28	0.09	0.18	L/G Kinase EP. no correction
	mg/dl	97.4	81.7	113	7.85	15.70	

COBAS INTEGRA®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Triglycerides	mmol/l	1.07	0.90	1.24	0.09	0.17	Lipase/Glycerol Dehydrogenase
	mg/dl	94.7	79.4	110	7.65	15.30	
Urea	mmol/l	7.03	5.98	8.08	0.53	1.05	Urease kinetic
	mg/dl	42.3	35.9	48.7	3.20	6.40	
	mmol/l	7.03	5.98	8.08	0.53	1.05	BUN
	mg/dl	19.7	16.7	22.7	1.50	3.00	
Uric Acid (Urate)	mmol/l	0.35	0.30	0.39	0.02	0.05	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.81	5.06	6.56	0.38	0.75	
	mmol/l	0.35	0.30	0.39	0.02	0.05	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.80	5.04	6.56	0.38	0.76	
	mmol/l	0.35	0.30	0.39	0.02	0.05	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.81	5.06	6.56	0.38	0.75	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
alpha-HBDH	U/l	122	96	148	13.00	26.00	Oxobutyrate < 10 mmol/l 37°C
	U/l	92	72	112	10.00	20.00	Oxobutyrate < 10 mmol/l 30°C
	U/l	69	54	84	7.50	15.00	Oxobutyrate < 10 mmol/l 25°C
Acid Phosphatase (non-prostatic)	U/l	5.58	3.74	7.42	0.92	1.84	1-Naphthyl Phosphate substrate Kinetic 37°C
	U/l	4.15	2.78	5.52	0.69	1.37	1-Naphthyl Phosphate, Kinetic with Pentane diol Activation 37°C
Acid Phosphatase (Prostatic)	U/l	15.6	10.5	20.7	2.55	5.10	1-Naphthyl Phosphate, Kinetic with Pentane diol Activation 37°C
	U/l	9.52	6.38	12.7	1.57	3.14	1-Naphthyl Phosphate substrate Kinetic 37°C
Acid Phosphatase (Total)	U/l	15.1	10.1	20.1	2.50	5.00	1-Naphthyl Phosphate substrate Kinetic 37°C
	U/l	19.7	13.2	26.2	3.25	6.50	1-Naphthyl Phosphate, Kinetic with Pentane diol Activation 37°C
Albumin	g/l	43.0	36.6	49.4	3.20	6.40	Bromocresol Green
	g/dl	4.30	3.66	4.94	0.32	0.64	
	g/l	43.2	36.7	49.7	3.25	6.50	Bromocresol Purple
	g/dl	4.32	3.67	4.97	0.33	0.65	
Alkaline Phosphatase	U/l	275	233	317	21.00	42.00	Diethanolamine buffer DEA 37°C
	U/l	214	182	246	16.00	32.00	Diethanolamine buffer DEA 30°C
	U/l	176	149	203	13.50	27.00	Diethanolamine buffer DEA 25°C
	U/l	123	104	142	9.50	19.00	Roche Integra AMP buffer 37°C
	U/l	96	81	111	7.50	15.00	Roche Integra AMP buffer 30°C
	U/l	79	66	92	6.50	13.00	Roche Integra AMP buffer 25°C
	U/l	168	143	193	12.50	25.00	AMP non-optimised 37°C
	U/l	131	111	151	10.00	20.00	AMP non-optimised 30°C
	U/l	107	91	123	8.00	16.00	AMP non-optimised 25°C

HITACHI SERIES®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Alkaline Phosphatase	U/l	182	155	209	13.50	27.00	Randox AMP 37°C
	U/l	142	121	163	10.50	21.00	Randox AMP 30°C
	U/l	116	99	133	8.50	17.00	Randox AMP 25°C
ALT (GPT)	U/l	37	30	44	3.50	7.00	Tris buffer without P5P 37°C
	U/l	27	22	32	2.50	5.00	Tris buffer without P5P 30°C
	U/l	21	17	25	2.00	4.00	Tris buffer without P5P 25°C
Amylase Pancreatic	U/l	69	59	79	5.00	10.00	Randox liquid stable pNPG7 37°C
	U/l	60	51	69	4.50	9.00	Roche liquid stable pNPG7 37°C
Amylase Total	U/l	93	79	107	7.00	14.00	Randox liquid stable pNPG7 37°C
	U/l	81	68	94	6.50	13.00	Roche liquid stable pNPG7 37°C
AST (GOT)	U/l	38	30	46	4.00	8.00	Tris buffer without P5P 37°C
	U/l	26	20	32	3.00	6.00	Tris buffer without P5P 30°C
	U/l	18	14	22	2.00	4.00	Tris buffer without P5P 25°C
Bicarbonate	mmol/l	12.7	10.1	15.3	1.30	2.60	Colorimetric
	mmol/l	13.1	10.4	15.8	1.35	2.70	Enzymatic
Bile Acids	µmol/l	27.2	21.8	32.6	2.70	5.40	5th Generation Colorimetric
Bilirubin Direct	µmol/l	19.8	15.7	23.9	2.05	4.10	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.16	0.918	1.40	0.12	0.24	
	µmol/l	20.0	15.8	24.2	2.10	4.20	Diazo with Sulphanilic Acid
	mg/dl	1.17	0.924	1.42	0.12	0.25	
	µmol/l	14.4	11.4	17.4	1.50	3.00	Roche JG factored
Bilirubin Total	mg/dl	0.842	0.667	1.02	0.09	0.18	
	µmol/l	26.4	20.8	32.0	2.80	5.60	Diazo with Dichloroaniline (DCA)
	mg/dl	1.54	1.22	1.86	0.16	0.32	

HITACHI SERIES®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Bilirubin Total	μmol/l	26.6	21.1	32.1	2.75	5.50	Diazo with Sulphanilic Acid
	mg/dl	1.56	1.23	1.89	0.17	0.33	
	μmol/l	25.5	20.2	30.8	2.65	5.30	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.49	1.18	1.80	0.16	0.31	
	μmol/l	26.3	20.7	31.9	2.80	5.60	Diazonium ion
	mg/dl	1.54	1.21	1.87	0.17	0.33	
Calcium	mmol/l	2.25	2.02	2.48	0.12	0.23	Cresolphthalein complexone
	mg/dl	9.02	8.10	9.94	0.46	0.92	
	mmol/l	2.25	2.03	2.47	0.11	0.22	Arsenazo III
	mg/dl	9.02	8.14	9.90	0.44	0.88	
	mmol/l	2.25	2.03	2.47	0.11	0.22	NM-BAPTA
	mg/dl	9.02	8.14	9.90	0.44	0.88	
Chloride	mmol/l	95.7	88.0	103	3.85	7.70	ISE indirect
Cholesterol	mmol/l	4.06	3.53	4.59	0.27	0.53	Cholesterol Oxidase
	mg/dl	157	136	178	10.50	21.00	
Cholinesterase	U/l	5714	4571	6857	571.50	1143.00	Colorimetric Butyrylthiocholine 37°C
CK Total	U/l	195	160	230	17.50	35.00	CK-NAC serum start (DGKC) 37°C
	U/l	122	100	144	11.00	22.00	CK-NAC serum start (DGKC) 30°C
	U/l	83	68	98	7.50	15.00	CK-NAC serum start (DGKC) 25°C
	U/l	206	169	243	18.50	37.00	CK-NAC substrate start (DGKC) 37°C
	U/l	129	106	152	11.50	23.00	CK-NAC substrate start (DGKC) 30°C
	U/l	88	72	104	8.00	16.00	CK-NAC substrate start (DGKC) 25°C
	U/l	207	169	245	19.00	38.00	CK-NAC (IFCC) 37°C
	U/l	130	106	154	12.00	24.00	CK-NAC (IFCC) 30°C
	U/l	88	72	104	8.00	16.00	CK-NAC (IFCC) 25°C

HITACHI SERIES®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Creatinine	µmol/l	125	99.6	150	12.70	25.40	Alkaline picrate no deproteinization
	mg/dl	1.41	1.13	1.69	0.14	0.28	
	µmol/l	128	102	154	13.00	26.00	Randox Enzymatic UV method
	mg/dl	1.45	1.15	1.75	0.15	0.30	
	µmol/l	125	100	150	12.50	25.00	Creatinine PAP method
	mg/dl	1.41	1.13	1.69	0.14	0.28	
	µmol/l	127	101	153	13.00	26.00	Roche Creatinine Plus
	mg/dl	1.44	1.14	1.74	0.15	0.30	
	µmol/l	128	102	154	13.00	26.00	Jaffe rate blanked comp. (-26 µmol/l)
	mg/dl	1.45	1.15	1.75	0.15	0.30	
D-3-Hydroxybutyrate	mmol/l	0.29	0.24	0.33	0.02	0.04	Tris buffer 100mmol pH 8.5
gamma-GT	U/l	48	40	56	4.00	8.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	38	32	44	3.00	6.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	30	25	35	2.50	5.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C
	U/l	51	44	58	3.50	7.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	40	35	45	2.50	5.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	31	27	35	2.00	4.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
	U/l	58	49	67	4.50	9.00	Randox Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	46	39	53	3.50	7.00	Randox Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
GLDH	U/l	36	30	42	3.00	6.00	Randox Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C
	U/l	20	16	24	2.00	4.00	Triethanolamine buffer 50 mmol 37°C
	U/l	15	12	18	1.50	3.00	Triethanolamine buffer 50 mmol 30°C
Glucose	U/l	12	10	14	1.00	2.00	Triethanolamine buffer 50 mmol 25°C
	mmol/l	6.22	5.29	7.15	0.47	0.93	Hexokinase
	mg/dl	112	95.3	129	8.35	16.70	

HITACHI SERIES®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Glucose	mmol/l	6.51	5.53	7.49	0.49	0.98	Glucose oxidase
	mg/dl	117	99.7	134	8.65	17.30	
HDL - Cholesterol	mmol/l	1.16	0.99	1.33	0.09	0.17	Direct HDL Immunoseparation
	mg/dl	44.8	38.2	51.4	3.30	6.60	
	mmol/l	1.09	0.92	1.26	0.08	0.17	Direct HDL PEGME
	mg/dl	42.1	35.7	48.5	3.20	6.40	
	mmol/l	1.08	0.92	1.24	0.08	0.16	Direct Clearance Method
	mg/dl	41.7	35.4	48.0	3.15	6.30	
	mmol/l	1.08	0.91	1.25	0.08	0.17	Direct HDL Roche 3rd generation
	mg/dl	41.7	35.3	48.1	3.20	6.40	
Iron	µmol/l	19.2	15.7	22.7	1.75	3.50	Colorimetric with ppt.
	µg/dl	107	87.8	126	9.60	19.20	
	µmol/l	19.3	15.8	22.8	1.75	3.50	Colorimetric without ppt.
	µg/dl	108	88.3	128	9.85	19.70	
Lactate	mmol/l	1.50	1.23	1.77	0.14	0.27	Colorimetric Lactate Oxidase
	mg/dl	13.5	11.1	15.9	1.20	2.40	
LD (LDH)	U/l	379	322	436	28.50	57.00	P->L German methods 37°C
	U/l	274	232	316	21.00	42.00	P->L German methods 30°C
	U/l	192	163	221	14.50	29.00	P->L German methods 25°C
	U/l	239	203	275	18.00	36.00	L->P IFCC 37°C
	U/l	173	147	199	13.00	26.00	L->P IFCC 30°C
	U/l	121	103	139	9.00	18.00	L->P IFCC 25°C
	U/l	269	229	309	20.00	40.00	L->P Randox 37°C
	U/l	194	165	223	14.50	29.00	L->P Randox 30°C
	U/l	136	116	156	10.00	20.00	L->P Randox 25°C

HITACHI SERIES®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Lipase	U/l	35	28	42	3.50	7.00	Other Colorimetric 37°C
	U/l	33	27	39	3.00	6.00	Roche Colorimetric 37°C
Lithium	mmol/l	1.02	0.90	1.14	0.06	0.12	Spectrophotometric
	mg/dl	0.708	0.624	0.792	0.04	0.08	
Magnesium	mmol/l	0.90	0.79	1.01	0.05	0.11	Xylidyl Blue
	mg/dl	2.18	1.92	2.44	0.13	0.26	
	mmol/l	0.89	0.78	1.00	0.05	0.11	Enzymatic
	mg/dl	2.16	1.90	2.42	0.13	0.26	
Phosphate Inorganic	mmol/l	1.35	1.15	1.55	0.10	0.20	Phosphomolybdate UV
	mg/dl	4.19	3.57	4.81	0.31	0.62	
Potassium	mmol/l	4.03	3.70	4.36	0.17	0.33	ISE method - indirect
Protein Total	g/l	59.2	47.4	71.0	5.90	11.80	Biuret reaction end point
	g/dl	5.92	4.74	7.10	0.59	1.18	
Sodium	mmol/l	144	136	152	4.00	8.00	ISE method - indirect
TIBC	µmol/l	41.9	33.1	50.7	4.40	8.80	FE+UIBC(saturation with iron)
	µg/dl	234	185	283	24.50	49.00	
Triglycerides	mmol/l	1.08	0.91	1.25	0.09	0.17	Lipase/GPO-PAP no correction
	mg/dl	95.6	80.5	111	7.55	15.10	
	mmol/l	1.08	0.91	1.25	0.09	0.17	Lipase/GPO-PAP 0.11mmol/l correction
	mg/dl	95.6	80.3	111	7.65	15.30	
	mmol/l	1.06	0.89	1.23	0.08	0.17	L/G Kinase EP. no correction
	mg/dl	93.8	78.9	109	7.45	14.90	
Urea	mmol/l	7.46	6.34	8.58	0.56	1.12	Urease kinetic
	mg/dl	44.8	38.1	51.5	3.35	6.70	
	mmol/l	7.46	6.34	8.58	0.56	1.12	BUN
	mg/dl	20.9	17.8	24.0	1.55	3.10	

HITACHI SERIES®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Uric Acid (Urate)	mmol/l	0.34	0.30	0.38	0.02	0.04	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.71	4.97	6.45	0.37	0.74	
	mmol/l	0.34	0.30	0.39	0.02	0.04	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.75	5.01	6.49	0.37	0.74	
	mmol/l	0.34	0.30	0.38	0.02	0.04	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.70	4.96	6.44	0.37	0.74	

ILab 600®/650®/Aries®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Albumin	g/l	42.0	35.7	48.3	3.15	6.30	Bromocresol Green
	g/dl	4.20	3.57	4.83	0.32	0.63	
Alkaline Phosphatase	U/l	195	166	224	14.50	29.00	AMP optimised to IFCC 37°C
	U/l	152	129	175	11.50	23.00	AMP optimised to IFCC 30°C
	U/l	125	106	144	9.50	19.00	AMP optimised to IFCC 25°C
ALT (GPT)	U/l	36	29	43	3.50	7.00	Tris buffer without P5P 37°C
	U/l	27	21	33	3.00	6.00	Tris buffer without P5P 30°C
	U/l	20	16	24	2.00	4.00	Tris buffer without P5P 25°C
AST (GOT)	U/l	35	28	42	3.50	7.00	Tris buffer without P5P 37°C
	U/l	24	19	29	2.50	5.00	Tris buffer without P5P 30°C
	U/l	17	13	21	2.00	4.00	Tris buffer without P5P 25°C
Bilirubin Total	µmol/l	31.3	24.7	37.9	3.30	6.60	Diazo with Sulphanilic Acid
	mg/dl	1.83	1.44	2.22	0.20	0.39	
Calcium	mmol/l	2.21	1.99	2.43	0.11	0.22	Cresolphthalein complexone
	mg/dl	8.86	7.98	9.74	0.44	0.88	
Chloride	mmol/l	96.4	88.7	104	3.85	7.70	ISE indirect
Cholesterol	mmol/l	3.96	3.44	4.48	0.26	0.52	Cholesterol Oxidase
	mg/dl	153	133	173	10.00	20.00	
CK Total	U/l	197	162	232	17.50	35.00	CK-NAC (IFCC) 37°C
	U/l	123	101	145	11.00	22.00	CK-NAC (IFCC) 30°C
	U/l	84	69	99	7.50	15.00	CK-NAC (IFCC) 25°C

ILab 600®/650®/Aries®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Creatinine	µmol/l	129	103	155	13.00	26.00	Alkaline picrate no deproteinization
	mg/dl	1.46	1.16	1.76	0.15	0.30	
gamma-GT	U/l	49	42	56	3.50	7.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	39	33	45	3.00	6.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	30	26	34	2.00	4.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
Glucose	mmol/l	6.49	5.52	7.46	0.49	0.97	Hexokinase
	mg/dl	117	99.5	135	8.75	17.50	
	mmol/l	6.18	5.25	7.11	0.47	0.93	Glucose oxidase
	mg/dl	111	94.6	127	8.20	16.40	
LD (LDH)	U/l	378	322	434	28.00	56.00	P->L German methods 37°C
	U/l	273	232	314	20.50	41.00	P->L German methods 30°C
	U/l	192	163	221	14.50	29.00	P->L German methods 25°C
Magnesium	mmol/l	0.90	0.80	1.01	0.05	0.11	Xylidyl Blue
	mg/dl	2.19	1.93	2.45	0.13	0.26	
	mmol/l	0.95	0.83	1.06	0.06	0.11	Enzymatic
	mg/dl	2.30	2.02	2.58	0.14	0.28	
Phosphate Inorganic	mmol/l	1.38	1.17	1.59	0.11	0.21	Phosphomolybdate UV
	mg/dl	4.28	3.63	4.93	0.33	0.65	
Potassium	mmol/l	4.11	3.78	4.44	0.17	0.33	ISE method - indirect
Protein Total	g/l	60.0	48.0	72.0	6.00	12.00	Biuret reaction end point
	g/dl	6.00	4.80	7.20	0.60	1.20	
Sodium	mmol/l	143	135	151	4.00	8.00	ISE method - indirect
Triglycerides	mmol/l	1.13	0.95	1.31	0.09	0.18	Lipase/GPO-PAP no correction
	mg/dl	100	83.9	116	8.05	16.10	
	mmol/l	1.16	0.98	1.34	0.09	0.18	L/G Kinase EP. no correction
	mg/dl	103	86.6	119	8.20	16.40	

ILab 600®/650®/Aries®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Urea	mmol/l	7.98	6.78	9.18	0.60	1.20	Urease end point
	mg/dl	48.0	40.7	55.3	3.65	7.30	
	mmol/l	7.98	6.78	9.18	0.60	1.20	BUN
	mg/dl	22.4	19.0	25.8	1.70	3.40	
Uric Acid (Urate)	mmol/l	0.37	0.32	0.42	0.02	0.05	Uricase peroxidase no ascorbate oxidase
	mg/dl	6.22	5.41	7.03	0.41	0.81	

JOHNSON AND JOHNSON VITROS®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Albumin	g/l	40.5	34.4	46.6	3.05	6.10	Ortho Vitros Microslide Systems
	g/dl	4.05	3.44	4.66	0.31	0.61	
Alkaline Phosphatase	U/l	149	127	171	11.00	22.00	Ortho Vitros Microslide Systems 37°C
ALT (GPT)	U/l	48	38	58	5.00	10.00	Ortho Vitros Microslide Systems 37°C
Amylase Total	U/l	62	53	71	4.50	9.00	Ortho Vitros Microslide Systems 37°C
AST (GOT)	U/l	51	41	61	5.00	10.00	Ortho Vitros Microslide visible slide 37°C
Bicarbonate	mmol/l	13.7	10.8	16.6	1.45	2.90	Ortho Vitros Microslide Systems
Bilirubin Total	µmol/l	24.3	19.2	29.4	2.55	5.10	Vitros 250/500/700/950 Total Bilirubin
	mg/dl	1.42	1.12	1.72	0.15	0.30	
	µmol/l	24.5	19.3	29.7	2.60	5.20	Vitros 250/500/700/950 Total BUBC
	mg/dl	1.43	1.13	1.73	0.15	0.30	
Calcium	mmol/l	2.24	2.01	2.47	0.12	0.23	Ortho Vitros Microslide Systems
	mg/dl	8.98	8.06	9.90	0.46	0.92	
	mmol/l	2.33	2.10	2.56	0.12	0.23	Vitros DT60/DT60 II/DTSC II
	mg/dl	9.34	8.42	10.3	0.46	0.92	
Chloride	mmol/l	98.6	90.7	107	3.95	7.90	Ortho Vitros Microslide Systems
	mmol/l	99.2	91.2	107	4.00	8.00	Vitros DT60/DT60 II/DTE II
Cholesterol	mmol/l	3.96	3.44	4.48	0.26	0.52	Ortho Vitros Microslide Systems
	mg/dl	153	133	173	10.00	20.00	
Cholinesterase	U/l	5798	4639	6957	579.50	1159.00	Ortho Vitros Microslide Systems 37°C
CK Total	U/l	192	157	227	17.50	35.00	Ortho Vitros Microslide Systems 37°C

JOHNSON AND JOHNSON VITROS®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Creatinine	μmol/l	123	98.1	148	12.45	24.90	Vitros 250/500/700/950/5.1FS single slide
	mg/dl	1.39	1.11	1.67	0.14	0.28	
	μmol/l	122	97.7	146	12.15	24.30	Vitros 250/500/700/950 double slide
	mg/dl	1.38	1.10	1.66	0.14	0.28	
	μmol/l	133	107	159	13.00	26.00	Vitros DT60/DT60 II/DTSC II
	mg/dl	1.50	1.21	1.79	0.15	0.29	
Free T4	μmol/l	125	99.9	150	12.55	25.10	Vitros IDMS Traceable
	mg/dl	1.41	1.13	1.69	0.14	0.28	
	pmol/l	25.4	19.0	31.8	3.20	6.40	Vitros ECi
Free T4	ng/dl	1.98	1.48	2.48	0.25	0.50	Vitros ECi
	pg/ml	19.8	14.8	24.8	2.50	5.00	
	pg/ml	19.8	14.8	24.8	2.50	5.00	Vitros ECi
gamma-GT	U/l	68	58	78	5.00	10.00	Ortho Vitros Microslide Systems 37°C
Glucose	mmol/l	5.94	5.05	6.83	0.45	0.89	Ortho Vitros Microslide Systems
	mg/dl	107	91.0	123	8.00	16.00	
	mmol/l	6.01	5.11	6.91	0.45	0.90	Vitros DT60/DT60 II
	mg/dl	108	92.1	124	7.95	15.90	
HDL - Cholesterol	mmol/l	1.19	1.01	1.37	0.09	0.18	Vitros Magnetic HDL
	mg/dl	45.9	39.0	52.8	3.45	6.90	
	mmol/l	1.14	0.97	1.31	0.09	0.17	Vitros 5.1 FS microtip assay
	mg/dl	44.0	37.3	50.7	3.35	6.70	
	mmol/l	1.16	0.99	1.33	0.09	0.17	Vitros dHDL PTA/MgCl ₂ direct precipitation
	mg/dl	44.8	38.1	51.5	3.35	6.70	
Iron	μmol/l	19.3	15.8	22.8	1.75	3.50	Ortho Vitros Microslide Systems
	μg/dl	108	88.3	128	9.85	19.70	
Lactate	mmol/l	1.37	1.12	1.62	0.13	0.25	Ortho Vitros Microslide Systems
	mg/dl	12.3	10.1	14.5	1.10	2.20	

JOHNSON AND JOHNSON VITROS®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
LD (LDH)	U/l	783	666	900	58.50	117.00	Ortho Vitros Microslide Systems 37°C
Lipase	U/l	261	210	312	25.50	51.00	Ortho Vitros Microslide Systems 37°C
Lithium	mmol/l	1.14	1.00	1.28	0.07	0.14	Ortho Vitros Microslide Systems
	mg/dl	0.792	0.694	0.890	0.05	0.10	
Magnesium	mmol/l	0.88	0.78	0.99	0.05	0.11	Ortho Vitros Microslide Systems
	mg/dl	2.14	1.89	2.39	0.13	0.25	
	mmol/l	0.86	0.76	0.97	0.05	0.10	Vitros DT60/DT60 II
	mg/dl	2.10	1.85	2.35	0.13	0.25	
Phosphate Inorganic	mmol/l	1.47	1.25	1.69	0.11	0.22	Ortho Vitros Microslide Systems
	mg/dl	4.56	3.88	5.24	0.34	0.68	
Potassium	mmol/l	4.07	3.75	4.39	0.16	0.32	Ortho Vitros Microslide Systems
	mmol/l	3.98	3.66	4.30	0.16	0.32	Vitros DT60/DT60 II/DTE II
Protein Total	g/l	59.9	47.9	71.9	6.00	12.00	Ortho Vitros Microslide Systems
	g/dl	5.99	4.79	7.19	0.60	1.20	
PSA Total	ng/ml =	6.93	5.20	8.66	0.87	1.73	Ortho Vitros ECi
	ng/ml =	13.8	10.4	17.2	1.70	3.40	Ortho Vitros 3600/5600/ECi PSA II
Sodium	mmol/l	144	137	151	3.50	7.00	Ortho Vitros Microslide Systems
	mmol/l	141	134	148	3.50	7.00	Vitros DT60/DT60 II/DTE II
Thyroid Stimulating Hormone	µU/ml =	1.44	1.15	1.73	0.15	0.29	Vitros ECi
TIBC	µmol/l	43.0	34.0	52.0	4.50	9.00	Ortho Vitros Microslide Systems
	µg/dl	240	190	290	25.00	50.00	
Triglycerides	mmol/l	1.32	1.11	1.53	0.11	0.21	Ortho Vitros Microslide Systems
	mg/dl	117	98.2	136	9.40	18.80	
	mmol/l	1.25	1.05	1.45	0.10	0.20	Vitros DT60/DT60 II
	mg/dl	111	92.9	129	9.05	18.10	

JOHNSON AND JOHNSON VITROS®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Urea	mmol/l	6.72	5.71	7.73	0.51	1.01	Ortho Vitros Microslide Systems
	mg/dl	40.4	34.3	46.5	3.05	6.10	
	mmol/l	6.83	5.81	7.85	0.51	1.02	Vitros DT60/DT60 II
	mg/dl	41.0	34.9	47.1	3.05	6.10	
	mmol/l	6.72	5.71	7.73	0.51	1.01	BUN
	mg/dl	18.9	16.1	21.7	1.40	2.80	
Uric Acid (Urate)	mmol/l	0.33	0.29	0.37	0.02	0.04	Ortho Vitros Microslide Systems
	mg/dl	5.54	4.82	6.26	0.36	0.72	
	mmol/l	0.33	0.29	0.37	0.02	0.04	Vitros DT60/DT60 II
	mg/dl	5.54	4.82	6.26	0.36	0.72	

Konelab 20/30/60®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Albumin	g/l	39.9	33.9	45.9	3.00	6.00	Bromocresol Green
	g/dl	3.99	3.39	4.59	0.30	0.60	
Alkaline Phosphatase	U/l	281	239	323	21.00	42.00	Diethanolamine buffer DEA 37°C
	U/l	219	186	252	16.50	33.00	Diethanolamine buffer DEA 30°C
	U/l	180	153	207	13.50	27.00	Diethanolamine buffer DEA 25°C
	U/l	184	157	211	13.50	27.00	AMP optimised to IFCC 37°C
	U/l	143	122	164	10.50	21.00	AMP optimised to IFCC 30°C
	U/l	118	100	136	9.00	18.00	AMP optimised to IFCC 25°C
	U/l	184	156	212	14.00	28.00	AMP optimised to NVKC/SFBC 37°C
	U/l	143	122	164	10.50	21.00	AMP optimised to NVKC/SFBC 30°C
ALT (GPT)	U/l	39	31	47	4.00	8.00	Tris buffer without P5P 37°C
	U/l	29	23	35	3.00	6.00	Tris buffer without P5P 30°C
	U/l	22	17	27	2.50	5.00	Tris buffer without P5P 25°C
Amylase Total	U/l	91	77	105	7.00	14.00	Randox - Ethylidene pNPG7 37°C
	U/l	81	69	93	6.00	12.00	bioMerieux 2-chloro-pNPG3 37°C
AST (GOT)	U/l	40	32	48	4.00	8.00	Tris buffer without P5P 37°C
	U/l	27	22	32	2.50	5.00	Tris buffer without P5P 30°C
	U/l	19	15	23	2.00	4.00	Tris buffer without P5P 25°C
Bile Acids	µmol/l	26.2	21.0	31.4	2.60	5.20	Enzymatic Colorimetric
Bilirubin Direct	µmol/l	19.1	15.1	23.1	2.00	4.00	Diazo with Sulphanilic Acid
	mg/dl	1.12	0.883	1.36	0.12	0.24	

Konelab 20/30/60®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Bilirubin Total	μmol/l	24.2	19.1	29.3	2.55	5.10	Diazo with Sulphanilic Acid
	mg/dl	1.42	1.12	1.72	0.15	0.30	
	μmol/l	24.2	19.1	29.3	2.55	5.10	Nitrobenzenediazonium salt
	mg/dl	1.42	1.12	1.72	0.15	0.30	
Calcium	mmol/l	2.29	2.06	2.52	0.12	0.23	Arsenazo III
	mg/dl	9.18	8.26	10.1	0.46	0.92	
Chloride	mmol/l	99.2	91.2	107	4.00	8.00	ISE direct
Cholesterol	mmol/l	3.95	3.43	4.47	0.26	0.52	Cholesterol Oxidase
	mg/dl	152	132	172	10.00	20.00	
CK Total	U/l	225	185	265	20.00	40.00	CK-NAC (IFCC) 37°C
	U/l	141	116	166	12.50	25.00	CK-NAC (IFCC) 30°C
	U/l	96	79	113	8.50	17.00	CK-NAC (IFCC) 25°C
Creatinine	μmol/l	126	101	151	12.50	25.00	Alkaline picrate no deproteinization
	mg/dl	1.42	1.14	1.70	0.14	0.28	
	μmol/l	122	97.8	146	12.10	24.20	Randox Enzymatic UV method
	mg/dl	1.38	1.11	1.65	0.14	0.27	
	μmol/l	123	98.7	147	12.15	24.30	Creatinine PAP method
	mg/dl	1.39	1.12	1.66	0.14	0.27	
	μmol/l	126	101	151	12.50	25.00	Jaffe rate blanked
	mg/dl	1.42	1.14	1.70	0.14	0.28	
gamma-GT	U/l	56	48	64	4.00	8.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	44	38	50	3.00	6.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	35	30	40	2.50	5.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C
	U/l	57	49	65	4.00	8.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	45	39	51	3.00	6.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	35	30	40	2.50	5.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C

Konelab 20/30/60®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Glucose	mmol/l	6.23	5.30	7.16	0.47	0.93	Hexokinase
	mg/dl	112	95.5	129	8.25	16.50	
	mmol/l	6.23	5.29	7.17	0.47	0.94	Glucose oxidase
	mg/dl	112	95.3	129	8.35	16.70	
HDL - Cholesterol	mmol/l	1.00	0.85	1.15	0.07	0.15	Direct HDL PEGME
	mg/dl	38.6	32.9	44.3	2.85	5.70	
Iron	µmol/l	22.2	18.2	26.2	2.00	4.00	Colorimetric without ppt.
	µg/dl	124	102	146	11.00	22.00	
LD (LDH)	U/l	436	370	502	33.00	66.00	P->L Scandinavian & Dutch 37°C
	U/l	315	267	363	24.00	48.00	P->L Scandinavian & Dutch 30°C
	U/l	221	188	254	16.50	33.00	P->L Scandinavian & Dutch 25°C
	U/l	241	205	277	18.00	36.00	L->P IFCC 37°C
	U/l	174	148	200	13.00	26.00	L->P IFCC 30°C
	U/l	122	104	140	9.00	18.00	L->P IFCC 25°C
Lithium	mmol/l	0.96	0.84	1.07	0.06	0.12	Ion selective electrode
	mg/dl	0.663	0.583	0.743	0.04	0.08	
Magnesium	mmol/l	0.96	0.84	1.07	0.06	0.12	Calmagite
	mg/dl	2.32	2.04	2.60	0.14	0.28	
	mmol/l	0.88	0.78	0.99	0.05	0.11	Xylidyl Blue
	mg/dl	2.14	1.89	2.39	0.13	0.25	
Phosphate Inorganic	mmol/l	1.40	1.19	1.61	0.11	0.21	Phosphomolybdate UV
	mg/dl	4.34	3.69	4.99	0.33	0.65	
Potassium	mmol/l	3.87	3.56	4.18	0.16	0.31	ISE method - direct

Konelab 20/30/60®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Protein Total	g/l	60.1	48.1	72.1	6.00	12.00	Biuret reaction end point
	g/dl	6.01	4.81	7.21	0.60	1.20	
Sodium	mmol/l	139	132	146	3.50	7.00	ISE method - direct
Triglycerides	mmol/l	1.15	0.97	1.34	0.09	0.19	Lipase/GPO-PAP no correction
	mg/dl	102	85.4	119	8.30	16.60	
	mmol/l	1.09	0.91	1.27	0.09	0.18	Lipase/GPO-PAP 0.11mmol/l correction
	mg/dl	96.5	80.9	112	7.80	15.60	
Urea	mmol/l	7.29	6.20	8.38	0.55	1.09	Urease kinetic
	mg/dl	43.8	37.3	50.3	3.25	6.50	
	mmol/l	7.29	6.20	8.38	0.55	1.09	BUN
	mg/dl	20.5	17.4	23.6	1.55	3.10	
Uric Acid (Urate)	mmol/l	0.35	0.31	0.40	0.02	0.05	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.95	5.17	6.73	0.39	0.78	
	mmol/l	0.36	0.31	0.40	0.02	0.05	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.96	5.19	6.73	0.39	0.77	
	mmol/l	0.36	0.31	0.41	0.02	0.05	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	6.03	5.26	6.80	0.39	0.77	

MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
alpha-HBDH	U/l	131	103	159	14.00	28.00	Oxobutyrate < 10 mmol/l 37°C
	U/l	99	78	120	10.50	21.00	Oxobutyrate < 10 mmol/l 30°C
	U/l	74	58	90	8.00	16.00	Oxobutyrate < 10 mmol/l 25°C
Acid Phosphatase (non-prostatic)	U/l	5.58	3.74	7.42	0.92	1.84	1-Naphthyl Phosphate substrate Kinetic 37°C
	U/l	4.15	2.78	5.52	0.69	1.37	1-Naphthyl Phosphate, Kinetic with Pentane diol Activation 37°C
Acid Phosphatase (Prostatic)	U/l	9.52	6.38	12.7	1.57	3.14	1-Naphthyl Phosphate substrate Kinetic 37°C
	U/l	15.6	10.5	20.7	2.55	5.10	1-Naphthyl Phosphate, Kinetic with Pentane diol Activation 37°C
Acid Phosphatase (Total)	U/l	15.1	10.1	20.1	2.50	5.00	1-Naphthyl Phosphate substrate Kinetic 37°C
	U/l	19.7	13.2	26.2	3.25	6.50	1-Naphthyl Phosphate, Kinetic with Pentane diol Activation 37°C
Albumin	g/l	42.2	35.8	48.6	3.20	6.40	Bromocresol Green
	g/dl	4.22	3.58	4.86	0.32	0.64	
	g/l	43.2	36.7	49.7	3.25	6.50	Bromocresol Purple
	g/dl	4.32	3.67	4.97	0.33	0.65	
	g/l	40.5	34.4	46.6	3.05	6.10	Ortho Vitros Microslide Systems
	g/dl	4.05	3.44	4.66	0.31	0.61	
	g/l	38.7	32.9	44.5	2.90	5.80	Turbidimetric Assays
	g/dl	3.87	3.29	4.45	0.29	0.58	
Alkaline Phosphatase	U/l	176	149	203	13.50	27.00	p-Nitrophenylphosphate AMP 37°C
	U/l	137	116	158	10.50	21.00	p-Nitrophenylphosphate AMP 30°C
	U/l	112	95	129	8.50	17.00	p-Nitrophenylphosphate AMP 25°C
	U/l	149	127	171	11.00	22.00	Ortho Vitros Microslide Systems 37°C

MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Alkaline Phosphatase	U/l	278	236	320	21.00	42.00	Diethanolamine buffer DEA 37°C
	U/l	217	184	250	16.50	33.00	Diethanolamine buffer DEA 30°C
	U/l	178	151	205	13.50	27.00	Diethanolamine buffer DEA 25°C
	U/l	178	152	204	13.00	26.00	AMP optimised to IFCC 37°C
	U/l	139	118	160	10.50	21.00	AMP optimised to IFCC 30°C
	U/l	114	97	131	8.50	17.00	AMP optimised to IFCC 25°C
	U/l	180	153	207	13.50	27.00	AMP optimised to NVKC/SFBC 37°C
	U/l	140	119	161	10.50	21.00	AMP optimised to NVKC/SFBC 30°C
ALT (GPT)	U/l	115	98	132	8.50	17.00	AMP optimised to NVKC/SFBC 25°C
	U/l	48	38	58	5.00	10.00	Ortho Vitros Microslide Systems 37°C
	U/l	42	34	50	4.00	8.00	Tris buffer with P5P 37°C
	U/l	31	25	37	3.00	6.00	Tris buffer with P5P 30°C
	U/l	24	19	29	2.50	5.00	Tris buffer with P5P 25°C
	U/l	36	29	43	3.50	7.00	Tris buffer without P5P 37°C
	U/l	27	21	33	3.00	6.00	Tris buffer without P5P 30°C
	U/l	20	16	24	2.00	4.00	Tris buffer without P5P 25°C
Amylase Pancreatic	U/l	36	29	43	3.50	7.00	Tris buffer SCE 37°C
	U/l	27	21	33	3.00	6.00	Tris buffer SCE 30°C
Amylase Total	U/l	20	16	24	2.00	4.00	Tris buffer SCE 25°C
	U/l	69	59	79	5.00	10.00	Randox liquid stable pNPG7 37°C
Amylase Total	U/l	60	51	69	4.50	9.00	Roche liquid stable pNPG7 37°C
	U/l	85	72	98	6.50	13.00	pNP Maltotrioside substrates 37°C
	U/l	81	69	93	6.00	12.00	Siemens - blocked pNPG7 37°C
	U/l	85	72	98	6.50	13.00	I.L. - blocked pNPG7 37°C
	U/l	69	59	79	5.00	10.00	Randox - Ethylidene pNPG7 37°C

MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Amylase Total	U/l	93	79	107	7.00	14.00	Randox liquid stable pNPG7 37°C
	U/l	86	73	99	6.50	13.00	Beckman maltotetraose 37°C
	U/l	86	73	99	6.50	13.00	Siemens - maltopenta/hexaoside 37°C
	U/l	82	70	94	6.00	12.00	Roche Integra 2-chloro-pNPG7 37°C
	U/l	62	53	71	4.50	9.00	Ortho Vitros Microslide Systems 37°C
	U/l	81	69	93	6.00	12.00	Other Roche 2-chloro-pNPG7 37°C
	U/l	82	70	94	6.00	12.00	Roche liquid stable pNPG7 37°C
	U/l	86	73	99	6.50	13.00	Siemens 2-chloro-pNPG3 37°C
	U/l	84	72	96	6.00	12.00	bioMerieux 2-chloro-pNPG3 37°C
	U/l	80	68	92	6.00	12.00	Beckman Coulter - blocked pNPG7 37°C
	U/l	86	73	99	6.50	13.00	Beckman Synchron AMY7 37°C
Apolipoprotein A-1	g/l	1.16	0.95	1.37	0.10	0.21	Immunoturbidimetric
	mg/dl	116	95.1	137	10.45	20.90	
Apolipoprotein B	g/l	0.63	0.52	0.74	0.06	0.11	Immunoturbidimetric
	mg/dl	63.0	51.7	74.3	5.65	11.30	
AST (GOT)	U/l	51	41	61	5.00	10.00	Ortho Vitros Microslide visible slide 37°C
	U/l	50	40	60	5.00	10.00	Tris buffer with P5P 37°C
	U/l	34	27	41	3.50	7.00	Tris buffer with P5P 30°C
	U/l	24	19	29	2.50	5.00	Tris buffer with P5P 25°C
	U/l	36	29	43	3.50	7.00	Tris buffer without P5P 37°C
	U/l	24	20	28	2.00	4.00	Tris buffer without P5P 30°C
	U/l	17	14	20	1.50	3.00	Tris buffer without P5P 25°C
	U/l	34	28	40	3.00	6.00	Tris buffer SCE 37°C
	U/l	23	19	27	2.00	4.00	Tris buffer SCE 30°C
	U/l	16	13	19	1.50	3.00	Tris buffer SCE 25°C

MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Bicarbonate	mmol/l	12.9	10.2	15.6	1.35	2.70	Colorimetric
	mmol/l	13.7	10.8	16.6	1.45	2.90	Ortho Vitros Microslide Systems
	mmol/l	13.4	10.6	16.2	1.40	2.80	Differential rate pH change
	mmol/l	13.5	10.7	16.3	1.40	2.80	Enzymatic
	mmol/l	13.8	11.0	16.6	1.40	2.80	Ion selective electrode
Bile Acids	μmol/l	28.2	22.6	33.8	2.80	5.60	4th Generation Colorimetric
	μmol/l	27.2	21.8	32.6	2.70	5.40	5th Generation Colorimetric
Bilirubin Direct	μmol/l	21.2	16.8	25.6	2.20	4.40	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.24	0.983	1.50	0.13	0.26	
	μmol/l	21.8	17.2	26.4	2.30	4.60	Diazo with Sulphanilic Acid
	mg/dl	1.28	1.01	1.55	0.14	0.27	
	μmol/l	14.7	11.6	17.8	1.55	3.10	Roche JG factored
	mg/dl	0.860	0.679	1.04	0.09	0.18	
	μmol/l	21.0	16.6	25.4	2.20	4.40	Diazo with Dichloroaniline (DCA)
	mg/dl	1.23	0.971	1.49	0.13	0.26	
	μmol/l	19.5	15.4	23.6	2.05	4.10	Oxidation to Biliverdin
	mg/dl	1.14	0.901	1.38	0.12	0.24	
Bilirubin Total	μmol/l	17.8	14.1	21.5	1.85	3.70	Modified Jendrassik
	mg/dl	1.04	0.825	1.26	0.11	0.22	
	μmol/l	24.3	19.2	29.4	2.55	5.10	Vitros 250/500/700/950 Total Bilirubin
	mg/dl	1.42	1.12	1.72	0.15	0.30	
	μmol/l	24.5	19.3	29.7	2.60	5.20	Vitros 250/500/700/950 Total BUBC
	mg/dl	1.43	1.13	1.73	0.15	0.30	
	μmol/l	35.3	27.9	42.7	3.70	7.40	Diazo with Dichloroaniline (DCA)
	mg/dl	2.07	1.63	2.51	0.22	0.44	

MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Bilirubin Total	μmol/l	28.2	22.3	34.1	2.95	5.90	Diazo with Sulphanilic Acid
	mg/dl	1.65	1.30	2.00	0.18	0.35	
	μmol/l	28.5	22.5	34.5	3.00	6.00	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.67	1.32	2.02	0.18	0.35	
	μmol/l	24.4	19.3	29.5	2.55	5.10	Nitrobenzenediazonium salt
	mg/dl	1.43	1.13	1.73	0.15	0.30	
	μmol/l	25.1	19.9	30.3	2.60	5.20	Diazonium ion
	mg/dl	1.47	1.16	1.78	0.16	0.31	
Calcium	μmol/l	30.0	23.7	36.3	3.15	6.30	Oxidation to Biliverdin
	mg/dl	1.76	1.39	2.13	0.19	0.37	
	μmol/l	35.2	27.8	42.6	3.70	7.40	Modified Jendrassik
	mg/dl	2.06	1.63	2.49	0.22	0.43	
	mmol/l	2.24	2.02	2.46	0.11	0.22	Cresolphthalein complexone
	mg/dl	8.98	8.10	9.86	0.44	0.88	
	mmol/l	2.24	2.01	2.47	0.12	0.23	Ortho Vitros Microslide Systems
	mg/dl	8.98	8.06	9.90	0.46	0.92	
	mmol/l	2.20	1.98	2.42	0.11	0.22	Ion selective electrode
	mg/dl	8.82	7.94	9.70	0.44	0.88	
	mmol/l	2.26	2.03	2.49	0.12	0.23	Methylthymol blue
	mg/dl	9.06	8.14	9.98	0.46	0.92	
Chloride	mmol/l	2.29	2.06	2.52	0.12	0.23	Arsenazo III
	mg/dl	9.18	8.26	10.1	0.46	0.92	
	mmol/l	2.26	2.03	2.49	0.12	0.23	NM-BAPTA
	mg/dl	9.06	8.14	9.98	0.46	0.92	

MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Chloride	mmol/l	98.6	90.7	107	3.95	7.90	Ortho Vitros Microslide Systems
	mmol/l	96.8	89.1	105	3.85	7.70	ISE indirect
	mmol/l	99.0	91.1	107	3.95	7.90	ISE direct
Cholesterol	mmol/l	3.96	3.44	4.48	0.26	0.52	Ortho Vitros Microslide Systems
	mg/dl	153	133	173	10.00	20.00	
	mmol/l	4.04	3.52	4.56	0.26	0.52	Cholesterol Oxidase
	mg/dl	156	136	176	10.00	20.00	
Cholinesterase	U/l	5894	4715	7073	589.50	1179.00	Colorimetric Butyrylthiocholine 37°C
CK Total	U/l	192	157	227	17.50	35.00	Ortho Vitros Microslide Systems 37°C
	U/l	211	173	249	19.00	38.00	CK-NAC serum start (DGKC) 37°C
	U/l	132	108	156	12.00	24.00	CK-NAC serum start (DGKC) 30°C
	U/l	90	74	106	8.00	16.00	CK-NAC serum start (DGKC) 25°C
	U/l	214	176	252	19.00	38.00	CK-NAC substrate start (DGKC) 37°C
	U/l	134	110	158	12.00	24.00	CK-NAC substrate start (DGKC) 30°C
	U/l	91	75	107	8.00	16.00	CK-NAC substrate start (DGKC) 25°C
	U/l	215	177	253	19.00	38.00	CK-NAC (IFCC) 37°C
	U/l	135	111	159	12.00	24.00	CK-NAC (IFCC) 30°C
	U/l	91	75	107	8.00	16.00	CK-NAC (IFCC) 25°C
	U/l	214	176	252	19.00	38.00	Monothioglycerol 37°C
	U/l	134	110	158	12.00	24.00	Monothioglycerol 30°C
	U/l	91	75	107	8.00	16.00	Monothioglycerol 25°C
	U/l	206	169	243	18.50	37.00	Dithioerythritol 37°C
	U/l	129	106	152	11.50	23.00	Dithioerythritol 30°C
	U/l	88	72	104	8.00	16.00	Dithioerythritol 25°C
	U/l	201	165	237	18.00	36.00	Dithioerythritol (DTE) IFCC correlated 37°C
	U/l	126	103	149	11.50	23.00	Dithioerythritol (DTE) IFCC correlated 30°C
	U/l	85	70	100	7.50	15.00	Dithioerythritol (DTE) IFCC correlated 25°C

MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Copper	μmol/l	18.6	14.9	22.3	1.85	3.70	Atomic absorption
	μg/dl	118	94.8	141	11.60	23.20	
	μmol/l	18.5	14.8	22.2	1.85	3.70	Colorimetric
	μg/dl	118	94.1	142	11.95	23.90	
Cortisol	nmol/l	453	340	566	56.50	113.00	Siemens Immulite 2000
	μg/dl	16.3	12.2	20.4	2.05	4.10	
Creatinine	μmol/l	122	97.3	147	12.35	24.70	Alkaline picrate with deproteinization
	mg/dl	1.38	1.10	1.66	0.14	0.28	
	μmol/l	124	99.0	149	12.50	25.00	Alkaline picrate no deproteinization
	mg/dl	1.40	1.12	1.68	0.14	0.28	
	μmol/l	123	98.1	148	12.45	24.90	Vitros 250/500/700/950/5.1FS single slide
	mg/dl	1.39	1.11	1.67	0.14	0.28	
	μmol/l	131	105	157	13.00	26.00	Randox Enzymatic UV method
	mg/dl	1.48	1.19	1.77	0.15	0.29	
	μmol/l	126	101	151	12.50	25.00	Creatinine PAP method
	mg/dl	1.42	1.14	1.70	0.14	0.28	
	μmol/l	126	101	151	12.50	25.00	Roche Creatinine Plus
	mg/dl	1.42	1.14	1.70	0.14	0.28	
	μmol/l	125	100	150	12.50	25.00	Jaffe rate blanked
	mg/dl	1.41	1.13	1.69	0.14	0.28	
	μmol/l	126	101	151	12.50	25.00	Jaffe rate blanked comp. (-26 μmol/l)
	mg/dl	1.42	1.14	1.70	0.14	0.28	
	μmol/l	120	95.7	144	12.15	24.30	Jaffe rate blanked compensated (-18 μmol/l)
	mg/dl	1.36	1.08	1.64	0.14	0.28	

MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Creatinine	μmol/l	125	99.9	150	12.55	25.10	Vitros IDMS Traceable
	mg/dl	1.41	1.13	1.69	0.14	0.28	
	μmol/l	122	97.9	146	12.05	24.10	IDMS traceable
	mg/dl	1.38	1.11	1.65	0.14	0.27	
D-3-Hydroxybutyrate	mmol/l	0.29	0.24	0.33	0.02	0.04	Tris buffer 100mmol pH 8.5
Digoxin	nmol/l	2.06	1.65	2.47	0.21	0.41	Immunturbidimetric
	ng/ml	1.61	1.29	1.93	0.16	0.32	
Folate	nmol/l	32.7	24.9	40.5	3.90	7.80	Siemens Immulite 2000
	ng/ml	14.4	11.0	17.8	1.70	3.40	
	nmol/l	82.1	62.4	102	9.85	19.70	Siemens Advia Centaur
	ng/ml	36.2	27.5	44.9	4.35	8.70	
Free T4	pmol/l	15.1	11.3	18.9	1.90	3.80	Abbott Architect
	ng/dl	1.18	0.881	1.48	0.15	0.30	
	pg/ml	11.8	8.81	14.8	1.50	2.99	Abbott Architect
	pmol/l	14.1	10.6	17.6	1.75	3.50	
	ng/dl	1.10	0.827	1.37	0.14	0.27	Siemens Advia Centaur
	pg/ml	11.0	8.27	13.7	1.37	2.73	
	pmol/l	14.3	10.7	17.9	1.80	3.60	Beckman Access
	ng/dl	1.12	0.835	1.41	0.14	0.29	
	pg/ml	11.2	8.35	14.1	1.43	2.85	Beckman Access
	pmol/l	15.4	11.6	19.2	1.90	3.80	
	ng/dl	1.20	0.905	1.50	0.15	0.30	BioMerieux Vidas
	pg/ml	12.0	9.05	15.0	1.48	2.95	
	pmol/l	17.6	13.2	22.0	2.20	4.40	Siemens Immulite 1000
	ng/dl	1.37	1.03	1.71	0.17	0.34	
	pg/ml	13.7	10.3	17.1	1.70	3.40	Siemens Immulite 1000

MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Free T4	pmol/l	16.3	12.2	20.4	2.05	4.10	Siemens Immulite 2000/2500
	ng/dl	1.27	0.952	1.59	0.16	0.32	
	pg/ml	12.7	9.52	15.9	1.59	3.18	Siemens Immulite 2000/2500
	pmol/l	25.4	19.0	31.8	3.20	6.40	Vitros ECI
	ng/dl	1.98	1.48	2.48	0.25	0.50	
	pg/ml	19.8	14.8	24.8	2.50	5.00	Vitros ECI
	pmol/l	17.4	13.0	21.8	2.20	4.40	Roche Elecsys
	ng/dl	1.36	1.01	1.71	0.18	0.35	
	pg/ml	13.6	10.1	17.1	1.75	3.50	Roche Elecsys
	pmol/l	17.1	12.8	21.4	2.15	4.30	Roche Modular E170
	ng/dl	1.33	0.998	1.66	0.17	0.33	
	pg/ml	13.3	9.98	16.6	1.66	3.32	Roche Modular E170
	pmol/l	17.3	12.9	21.7	2.20	4.40	Roche Cobas E411
	ng/dl	1.35	1.01	1.69	0.17	0.34	
	pg/ml	13.5	10.1	16.9	1.70	3.40	Roche Cobas E411
	pmol/l	17.1	12.8	21.4	2.15	4.30	Roche Cobas 6000/8000
	ng/dl	1.33	0.998	1.66	0.17	0.33	
	pg/ml	13.3	9.98	16.6	1.66	3.32	Roche Cobas 6000/8000
Gentamicin	μmol/l	8.12	6.50	9.74	0.81	1.62	Immunoturbidimetric
	μg/ml	3.88	3.11	4.65	0.39	0.77	
gamma-GT	U/l	51	43	59	4.00	8.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	40	34	46	3.00	6.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	31	27	35	2.00	4.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C

MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
gamma-GT	U/l	68	58	78	5.00	10.00	Ortho Vitros Microslide Systems 37°C
	U/l	44	38	50	3.00	6.00	Gamma glutamyl-4-nitroanilide 37°C
	U/l	35	30	40	2.50	5.00	Gamma glutamyl-4-nitroanilide 30°C
	U/l	27	23	31	2.00	4.00	Gamma glutamyl-4-nitroanilide 25°C
	U/l	56	48	64	4.00	8.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	44	38	50	3.00	6.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	35	30	40	2.50	5.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
	U/l	58	49	67	4.50	9.00	Randox Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	46	39	53	3.50	7.00	Randox Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	36	30	42	3.00	6.00	Randox Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C
GLDH	U/l	16	13	19	1.50	3.00	Triethanolamine buffer 50 mmol 37°C
	U/l	12	10	14	1.00	2.00	Triethanolamine buffer 50 mmol 30°C
	U/l	10	8	12	1.00	2.00	Triethanolamine buffer 50 mmol 25°C
Glucose	mmol/l	5.94	5.05	6.83	0.45	0.89	Ortho Vitros Microslide Systems
	mg/dl	107	91.0	123	8.00	16.00	
	mmol/l	6.23	5.30	7.16	0.47	0.93	Glucose dehydrogenase
	mg/dl	112	95.5	129	8.25	16.50	
	mmol/l	6.24	5.30	7.18	0.47	0.94	Hexokinase
	mg/dl	112	95.5	129	8.25	16.50	
	mmol/l	6.12	5.20	7.04	0.46	0.92	Oxygen electrode
	mg/dl	110	93.7	126	8.15	16.30	
	mmol/l	6.37	5.42	7.32	0.48	0.95	Glucose oxidase
	mg/dl	115	97.7	132	8.65	17.30	
HDL - Cholesterol	mmol/l	1.24	1.05	1.43	0.10	0.19	Direct HDL PPD
	mg/dl	47.9	40.5	55.3	3.70	7.40	

MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
HDL - Cholesterol	mmol/l	1.15	0.98	1.32	0.08	0.17	Direct HDL Immunoseparation
	mg/dl	44.4	37.9	50.9	3.25	6.50	
	mmol/l	1.19	1.01	1.37	0.09	0.18	Vitros Magnetic HDL
	mg/dl	45.9	39.0	52.8	3.45	6.90	
	mmol/l	1.06	0.90	1.22	0.08	0.16	Direct HDL PEGME
	mg/dl	40.9	34.8	47.0	3.05	6.10	
	mmol/l	1.08	0.92	1.24	0.08	0.16	Direct Clearance Method
	mg/dl	41.7	35.5	47.9	3.10	6.20	
	mmol/l	1.16	0.99	1.33	0.09	0.17	Vitros dHDL PTA/MgCl2 direct precipitation
	mg/dl	44.8	38.1	51.5	3.35	6.70	
	mmol/l	1.07	0.91	1.23	0.08	0.16	Direct HDL Roche 3rd generation
	mg/dl	41.3	35.1	47.5	3.10	6.20	
	mmol/l	1.18	1.01	1.35	0.09	0.17	HDL - Ultra
	mg/dl	45.5	39.0	52.0	3.25	6.50	
Immunoglobulin A	g/l	2.03	1.52	2.54	0.26	0.51	Immunoturbidimetric
	mg/dl	203	152	254	25.50	51.00	
Immunoglobulin G	g/l	8.48	6.95	10.0	0.77	1.53	Immunoturbidimetric
	mg/dl	848	695	1001	76.50	153.00	
Immunoglobulin M	g/l	0.87	0.70	1.05	0.09	0.18	Immunoturbidimetric
	mg/dl	87.3	69.8	105	8.75	17.50	
Iron	μmol/l	19.1	15.7	22.5	1.70	3.40	Colorimetric with ppt.
	μg/dl	107	87.8	126	9.60	19.20	
	μmol/l	19.4	15.9	22.9	1.75	3.50	Colorimetric without ppt.
	μg/dl	108	88.9	127	9.55	19.10	
	μmol/l	19.3	15.8	22.8	1.75	3.50	Ortho Vitros Microslide Systems
	μg/dl	108	88.3	128	9.85	19.70	

MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Lactate	mmol/l	1.49	1.22	1.76	0.14	0.27	Colorimetric Lactate Oxidase
	mg/dl	13.4	11.0	15.8	1.20	2.40	
	mmol/l	1.37	1.12	1.62	0.13	0.25	Ortho Vitros Microslide Systems
	mg/dl	12.3	10.1	14.5	1.10	2.20	
	mmol/l	1.46	1.20	1.72	0.13	0.26	UV LDH
	mg/dl	13.2	10.8	15.6	1.20	2.40	
LAP	U/l	17	14	20	1.50	3.00	NAGEL 37°C
LD (LDH)	U/l	783	666	900	58.50	117.00	Ortho Vitros Microslide Systems 37°C
	U/l	240	204	276	18.00	36.00	L->P 37°C
	U/l	173	147	199	13.00	26.00	L->P 30°C
	U/l	122	103	141	9.50	19.00	L->P 25°C
	U/l	458	389	527	34.50	69.00	P->L Scandinavian & Dutch 37°C
	U/l	331	281	381	25.00	50.00	P->L Scandinavian & Dutch 30°C
	U/l	232	197	267	17.50	35.00	P->L Scandinavian & Dutch 25°C
	U/l	385	327	443	29.00	58.00	P->L German methods 37°C
	U/l	278	236	320	21.00	42.00	P->L German methods 30°C
	U/l	195	166	224	14.50	29.00	P->L German methods 25°C
	U/l	394	335	453	29.50	59.00	P->L SFBC 37°C
	U/l	284	242	326	21.00	42.00	P->L SFBC 30°C
	U/l	200	170	230	15.00	30.00	P->L SFBC 25°C
	U/l	244	207	281	18.50	37.00	L->P IFCC 37°C
	U/l	176	149	203	13.50	27.00	L->P IFCC 30°C
	U/l	124	105	143	9.50	19.00	L->P IFCC 25°C
	U/l	269	229	309	20.00	40.00	L->P Randox 37°C
	U/l	194	165	223	14.50	29.00	L->P Randox 30°C
	U/l	136	116	156	10.00	20.00	L->P Randox 25°C

MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Lipase	U/l	36	29	43	3.50	7.00	Other Colorimetric 37°C
	U/l	261	210	312	25.50	51.00	Ortho Vitros Microslide Systems 37°C
	U/l	34	28	40	3.00	6.00	Roche Colorimetric 37°C
	U/l	184	148	220	18.00	36.00	Randox Turbidimetric with colipase 37°C
	U/l	44	35	53	4.50	9.00	Randox Colorimetric 37°C
Lithium	mmol/l	1.14	1.00	1.28	0.07	0.14	Ortho Vitros Microslide Systems
	mg/dl	0.792	0.694	0.890	0.05	0.10	
	mmol/l	1.01	0.89	1.13	0.06	0.12	Flame photometry
	mg/dl	0.701	0.619	0.783	0.04	0.08	
	mmol/l	0.97	0.85	1.09	0.06	0.12	Ion selective electrode
	mg/dl	0.673	0.592	0.754	0.04	0.08	
	mmol/l	0.99	0.87	1.10	0.06	0.12	Spectrophotometric
	mg/dl	0.684	0.602	0.766	0.04	0.08	
Magnesium	mmol/l	0.97	0.86	1.09	0.06	0.12	Randox Colorimetric
	mg/dl	0.676	0.595	0.757	0.04	0.08	
	mmol/l	0.92	0.81	1.03	0.06	0.11	Arsenazo III
	mg/dl	2.24	1.97	2.51	0.14	0.27	
	mmol/l	0.88	0.78	0.99	0.05	0.11	Ortho Vitros Microslide Systems
	mg/dl	2.14	1.89	2.39	0.13	0.25	
	mmol/l	0.88	0.77	0.98	0.05	0.11	Atomic absorption
	mg/dl	2.13	1.87	2.39	0.13	0.26	
	mmol/l	0.92	0.81	1.02	0.05	0.11	Calmagite
	mg/dl	2.22	1.96	2.48	0.13	0.26	

MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Magnesium	mmol/l	0.91	0.80	1.02	0.05	0.11	Xylidyl Blue
	mg/dl	2.20	1.94	2.46	0.13	0.26	
	mmol/l	0.86	0.76	0.97	0.05	0.10	Methylthymol blue
	mg/dl	2.10	1.85	2.35	0.13	0.25	
	mmol/l	0.90	0.79	1.01	0.05	0.11	Chlorphosphonazo III
	mg/dl	2.18	1.92	2.44	0.13	0.26	
	mmol/l	0.89	0.78	1.00	0.05	0.11	Enzymatic
	mg/dl	2.16	1.90	2.42	0.13	0.26	
NEFA	mmol/l	1.58	1.34	1.82	0.12	0.24	Colorimetric
Osmolality	mOsm/kg	290	232	348	29.00	58.00	Calculated
	mOsm/kg	307	245	369	31.00	62.00	Freezing point depression
	mOsm/kg	296	237	355	29.50	59.00	Vapour pressure
Paracetamol	mmol/l	0.08	0.07	0.10	0.01	0.02	Colorimetric
	mg/l	12.4	9.99	14.8	1.21	2.41	
Phosphate Inorganic	mmol/l	1.47	1.25	1.69	0.11	0.22	Ortho Vitros Microslide Systems
	mg/dl	4.56	3.88	5.24	0.34	0.68	
	mmol/l	1.38	1.17	1.59	0.11	0.21	Phosphomolybdate enzymatic
	mg/dl	4.28	3.63	4.93	0.33	0.65	
	mmol/l	1.36	1.16	1.56	0.10	0.20	Phosphomolybdate UV
	mg/dl	4.22	3.60	4.84	0.31	0.62	
Potassium	mmol/l	4.07	3.75	4.39	0.16	0.32	Ortho Vitros Microslide Systems
	mmol/l	3.99	3.67	4.31	0.16	0.32	Flame photometry
	mmol/l	3.96	3.65	4.27	0.16	0.31	ISE method - direct
	mmol/l	3.99	3.67	4.31	0.16	0.32	ISE method - indirect
	mmol/l	4.12	3.79	4.45	0.17	0.33	Enzymatic

MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Protein Total	g/l	59.9	47.9	71.9	6.00	12.00	Ortho Vitros Microslide Systems
	g/dl	5.99	4.79	7.19	0.60	1.20	
	g/l	59.7	47.8	71.6	5.95	11.90	Biuret reaction end point
	g/dl	5.97	4.78	7.16	0.60	1.19	
	g/l	58.3	46.6	70.0	5.85	11.70	Biuret reaction kinetic
	g/dl	5.83	4.66	7.00	0.59	1.17	
PSA Total	ng/ml =	14.0	10.5	17.5	1.75	3.50	Roche Elecsys Modular E170
	ng/ml =	14.5	10.9	18.1	1.80	3.60	Beckman Access Hybritech TPSA
	ng/ml =	12.7	9.52	15.9	1.59	3.18	bioMerieux VIDAS TPSA
	ng/ml =	11.2	8.41	14.0	1.40	2.79	Siemens Advia Centaur
	ng/ml =	11.2	8.43	14.0	1.39	2.77	Abbott Architect
	ng/ml =	6.93	5.20	8.66	0.87	1.73	Ortho Vitros ECi
	ng/ml =	14.4	10.8	18.0	1.80	3.60	Cobas E411
	ng/ml =	13.9	10.5	17.3	1.70	3.40	Roche Cobas 6000/8000
	ng/ml =	13.8	10.4	17.2	1.70	3.40	Ortho Vitros 3600/5600/ECi PSA II
Salicylate	mmol/l	0.43	0.35	0.52	0.04	0.09	Enzymatic
	mg/dl	5.95	4.76	7.14	0.60	1.19	
Sodium	mmol/l	144	137	151	3.50	7.00	Ortho Vitros Microslide Systems
	mmol/l	140	133	147	3.50	7.00	Flame photometry
	mmol/l	141	134	148	3.50	7.00	ISE method - direct
	mmol/l	142	135	149	3.50	7.00	ISE method - indirect
	mmol/l	147	140	154	3.50	7.00	Enzymatic
Theophylline	μmol/l	29.7	23.8	35.6	2.95	5.90	Immunoturbidimetric
	μg/ml	5.35	4.29	6.41	0.53	1.06	
Thyroid Stimulating Hormone	μU/ml =	1.22	0.98	1.46	0.12	0.24	Abbott Architect

MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Thyroid Stimulating Hormone	µU/ml =	1.56	1.25	1.87	0.16	0.31	bioMerieux VIDAS TSH
	µU/ml =	1.32	1.06	1.58	0.13	0.26	Siemens Immulite 1000
	µU/ml =	1.46	1.17	1.75	0.15	0.29	Siemens Immulite 2000/2500
	µU/ml =	1.44	1.15	1.73	0.15	0.29	Vitros ECI
	µU/ml =	1.62	1.29	1.95	0.17	0.33	Roche Elecsys
	µU/ml =	1.62	1.30	1.94	0.16	0.32	Roche Modular E170
	µU/ml =	1.64	1.31	1.97	0.17	0.33	Roche Cobas E411
	µU/ml =	1.61	1.29	1.93	0.16	0.32	Roche Cobas 6000/8000
TIBC	µmol/l	43.0	34.0	52.0	4.50	9.00	Ortho Vitros Microslide Systems
	µg/dl	240	190	290	25.00	50.00	
	µmol/l	44.7	35.3	54.1	4.70	9.40	Removal of excess free iron
	µg/dl	250	197	303	26.50	53.00	
	µmol/l	42.6	33.6	51.6	4.50	9.00	FE+UIBC(saturation with iron)
	µg/dl	238	188	288	25.00	50.00	
	µmol/l	44.7	35.3	54.1	4.70	9.40	Direct Colorimetric
	µg/dl	250	197	303	26.50	53.00	
Tobramycin	µmol/l	5.47	4.38	6.56	0.55	1.09	Immunoturbidimetric
	µg/ml	2.56	2.05	3.07	0.26	0.51	
Total T3	nmol/l	2.47	1.85	3.09	0.31	0.62	Abbott AXSYM
	ng/ml	1.61	1.20	2.02	0.21	0.41	
	ng/dl	161	120	202	20.50	41.00	Abbott AXSYM
	nmol/l	2.53	1.90	3.16	0.32	0.63	Abbott Architect
	ng/ml	1.65	1.24	2.06	0.21	0.41	
	ng/dl	165	124	206	20.50	41.00	Abbott Architect

MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Total T3	nmol/l	2.90	2.18	3.62	0.36	0.72	Siemens Advia Centaur
	ng/ml	1.89	1.42	2.36	0.24	0.47	
	ng/dl	189	142	236	23.50	47.00	Siemens Advia Centaur
	nmol/l	2.56	1.92	3.20	0.32	0.64	Siemens Immulite 1000
	ng/ml	1.67	1.25	2.09	0.21	0.42	
	ng/dl	167	125	209	21.00	42.00	Siemens Immulite 1000
	nmol/l	2.80	2.10	3.50	0.35	0.70	Roche Modular E170
	ng/ml	1.82	1.37	2.27	0.23	0.45	
Total T4	ng/dl	182	137	227	22.50	45.00	Roche Modular E170
	nmol/l	68.6	51.4	85.8	8.60	17.20	Abbott Architect
	µg/dl	5.35	4.01	6.69	0.67	1.34	
	ng/ml	53.5	40.1	66.9	6.70	13.40	Abbott Architect
	nmol/l	78.9	59.2	98.6	9.85	19.70	Siemens Advia Centaur
	µg/dl	6.15	4.62	7.68	0.77	1.53	
	ng/ml	61.5	46.2	76.8	7.65	15.30	Siemens Advia Centaur
	nmol/l	69.9	52.4	87.4	8.75	17.50	Siemens Immulite 1000
	µg/dl	5.45	4.09	6.81	0.68	1.36	
	ng/ml	54.5	40.9	68.1	6.80	13.60	Siemens Immulite 1000
	nmol/l	69.1	51.8	86.4	8.65	17.30	Siemens Immulite 2000/2500
	µg/dl	5.39	4.04	6.74	0.68	1.35	
	ng/ml	53.9	40.4	67.4	6.75	13.50	Siemens Immulite 2000/2500
	nmol/l	77.2	57.9	96.5	9.65	19.30	Roche Modular E170
	µg/dl	6.02	4.52	7.52	0.75	1.50	
	ng/ml	60.2	45.2	75.2	7.50	15.00	Roche Modular E170

MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Transferrin	g/l	2.07	1.66	2.48	0.21	0.41	Immunoturbidimetric
	mg/dl	207	166	248	20.50	41.00	
Triglycerides	mmol/l	1.11	0.93	1.29	0.09	0.18	Lipase/GPO-PAP no correction
	mg/dl	98.2	82.4	114	7.90	15.80	
	mmol/l	1.10	0.92	1.28	0.09	0.18	Lipase/GPO-PAP 0.11mmol/l correction
	mg/dl	97.4	81.5	113	7.95	15.90	
	mmol/l	1.11	0.94	1.28	0.09	0.17	L/G Kinase EP. no correction
	mg/dl	98.2	82.8	114	7.70	15.40	
	mmol/l	1.08	0.91	1.25	0.09	0.17	Lipase/Glycerol Dehydrogenase
	mg/dl	95.6	80.5	111	7.55	15.10	
Urea	mmol/l	1.32	1.11	1.53	0.11	0.21	Ortho Vitros Microslide Systems
	mg/dl	117	98.2	136	9.40	18.80	
	mmol/l	6.72	5.71	7.73	0.51	1.01	Ortho Vitros Microslide Systems
	mg/dl	40.4	34.3	46.5	3.05	6.10	
	mmol/l	7.48	6.36	8.60	0.56	1.12	Urease end point
	mg/dl	45.0	38.2	51.8	3.40	6.80	
	mmol/l	7.32	6.22	8.42	0.55	1.10	Urease kinetic
	mg/dl	44.0	37.4	50.6	3.30	6.60	
	mmol/l	7.05	5.99	8.11	0.53	1.06	Urease hypochlorite
	mg/dl	42.4	36.0	48.8	3.20	6.40	
	mmol/l	7.60	6.46	8.74	0.57	1.14	Urease Berthelot
	mg/dl	45.7	38.8	52.6	3.45	6.90	
	mmol/l	7.32	6.22	8.42	0.55	1.10	BUN
	mg/dl	20.5	17.4	23.6	1.55	3.10	
Uric Acid (Urate)	mmol/l	0.33	0.29	0.37	0.02	0.04	Ortho Vitros Microslide Systems
	mg/dl	5.54	4.82	6.26	0.36	0.72	

MEAN OF ALL INSTRUMENTS

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Uric Acid (Urate)	mmol/l	0.34	0.30	0.39	0.02	0.05	Uricase catalase 340nm
	mg/dl	5.71	4.96	6.46	0.38	0.75	
	mmol/l	0.34	0.30	0.39	0.02	0.04	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.76	5.02	6.50	0.37	0.74	
	mmol/l	0.35	0.30	0.39	0.02	0.05	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.86	5.11	6.61	0.38	0.75	
	mmol/l	0.34	0.29	0.38	0.02	0.04	Spectrophotometric at 280-290
	mg/dl	5.66	4.92	6.40	0.37	0.74	
Vitamin B12	pmol/l	414	331	497	41.50	83.00	Siemens Advia Centaur
	pg/ml	561	449	673	56.00	112.00	
Zinc	μmol/l	23.7	19.0	28.4	2.35	4.70	Colorimetric with deproteinisation
	μg/dl	155	124	186	15.50	31.00	

**MEAN OF ALL INSTRUMENTS (Elec.)**

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Range

Analyte	unit	target	low	high	1SD	2SD	methods
Albumin (electrophoresis)		68.0	61.3	74.7	3.35	6.70	% of total Protein (Beckman Capillary)
alpha-1-globulin		5.4	4.1	6.6	0.64	1.28	% of total Protein (Beckman Capillary)
alpha-2-globulin		6.4	4.9	7.9	0.77	1.54	% of total Protein (Beckman Capillary)
beta-globulin		9.4	7.1	11.7	1.13	2.26	% of total Protein (Beckman Capillary)
gamma-globulin		10.9	8.3	13.5	1.31	2.62	% of total Protein (Beckman Capillary)

MINDRAY BS-200/300/400

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Albumin	g/l	42.6	36.2	49.0	3.20	6.40	Bromocresol Green
	g/dl	4.26	3.62	4.90	0.32	0.64	
Alkaline Phosphatase	U/l	287	244	330	21.50	43.00	Diethanolamine buffer DEA 37°C
	U/l	224	190	258	17.00	34.00	Diethanolamine buffer DEA 30°C
	U/l	183	156	210	13.50	27.00	Diethanolamine buffer DEA 25°C
ALT (GPT)	U/l	38	30	46	4.00	8.00	Tris buffer without P5P 37°C
	U/l	28	22	34	3.00	6.00	Tris buffer without P5P 30°C
	U/l	21	17	25	2.00	4.00	Tris buffer without P5P 25°C
Calcium	mmol/l	2.25	2.02	2.48	0.12	0.23	Arsenazo III
	mg/dl	9.02	8.10	9.94	0.46	0.92	
Chloride	mmol/l	97.9	90.1	106	3.90	7.80	ISE direct
Cholesterol	mmol/l	4.13	3.59	4.67	0.27	0.54	Cholesterol Oxidase
	mg/dl	159	139	179	10.00	20.00	
CK Total	U/l	209	171	247	19.00	38.00	CK-NAC (IFCC) 37°C
	U/l	131	107	155	12.00	24.00	CK-NAC (IFCC) 30°C
	U/l	89	73	105	8.00	16.00	CK-NAC (IFCC) 25°C
Creatinine	μmol/l	121	97.1	145	11.95	23.90	Alkaline picrate with deproteinization
	mg/dl	1.37	1.10	1.64	0.14	0.27	
	μmol/l	118	94.2	142	11.90	23.80	Alkaline picrate no deproteinization
	mg/dl	1.33	1.06	1.60	0.14	0.27	
	μmol/l	123	98.8	147	12.10	24.20	Jaffe rate blanked
	mg/dl	1.39	1.12	1.66	0.14	0.27	

MINDRAY BS-200/300/400

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
gamma-GT	U/l	51	43	59	4.00	8.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	40	34	46	3.00	6.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	31	27	35	2.00	4.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
Glucose	mmol/l	6.55	5.57	7.53	0.49	0.98	Glucose oxidase
	mg/dl	118	100	136	9.00	18.00	
Magnesium	mmol/l	0.89	0.79	1.00	0.05	0.11	Xylidyl Blue
	mg/dl	2.17	1.91	2.43	0.13	0.26	
Phosphate Inorganic	mmol/l	1.49	1.27	1.71	0.11	0.22	Phosphomolybdate UV
	mg/dl	4.62	3.94	5.30	0.34	0.68	
Potassium	mmol/l	3.90	3.59	4.21	0.16	0.31	ISE method - direct
Protein Total	g/l	59.9	47.9	71.9	6.00	12.00	Biuret reaction end point
	g/dl	5.99	4.79	7.19	0.60	1.20	
Sodium	mmol/l	140	133	147	3.50	7.00	ISE method - direct
Triglycerides	mmol/l	1.14	0.96	1.32	0.09	0.18	Lipase/GPO-PAP no correction
	mg/dl	101	85.0	117	8.00	16.00	
Urea	mmol/l	7.37	6.26	8.48	0.56	1.11	Urease kinetic
	mg/dl	44.3	37.6	51.0	3.35	6.70	
	mmol/l	7.50	6.38	8.62	0.56	1.12	Urease hypochlorite
	mg/dl	45.1	38.3	51.9	3.40	6.80	
	mmol/l	7.37	6.26	8.48	0.56	1.11	BUN
	mg/dl	20.7	17.6	23.8	1.55	3.10	
Uric Acid (Urate)	mmol/l	0.35	0.31	0.40	0.02	0.05	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.90	5.14	6.66	0.38	0.76	
	mmol/l	0.35	0.30	0.39	0.02	0.05	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.86	5.11	6.61	0.38	0.75	

PRESTIGE 24i

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Albumin	g/l	42.9	36.5	49.3	3.20	6.40	Bromocresol Green
	g/dl	4.29	3.65	4.93	0.32	0.64	
Alkaline Phosphatase	U/l	272	231	313	20.50	41.00	Diethanolamine buffer DEA 37°C
	U/l	212	180	244	16.00	32.00	Diethanolamine buffer DEA 30°C
	U/l	174	148	200	13.00	26.00	Diethanolamine buffer DEA 25°C
ALT (GPT)	U/l	38	31	45	3.50	7.00	Tris buffer without P5P 37°C
	U/l	28	23	33	2.50	5.00	Tris buffer without P5P 30°C
	U/l	21	17	25	2.00	4.00	Tris buffer without P5P 25°C
AST (GOT)	U/l	39	31	47	4.00	8.00	Tris buffer without P5P 37°C
	U/l	26	21	31	2.50	5.00	Tris buffer without P5P 30°C
	U/l	19	15	23	2.00	4.00	Tris buffer without P5P 25°C
Bilirubin Total	µmol/l	30.4	24.0	36.8	3.20	6.40	Diazo with Sulphanilic Acid
	mg/dl	1.78	1.40	2.16	0.19	0.38	
	µmol/l	26.7	21.1	32.3	2.80	5.60	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.56	1.23	1.89	0.17	0.33	
Calcium	mmol/l	2.36	2.12	2.60	0.12	0.24	Arsenazo III
	mg/dl	9.46	8.50	10.4	0.48	0.96	
Cholesterol	mmol/l	4.10	3.57	4.63	0.27	0.53	Cholesterol Oxidase
	mg/dl	158	138	178	10.00	20.00	
CK Total	U/l	221	181	261	20.00	40.00	CK-NAC (IFCC) 37°C
	U/l	138	113	163	12.50	25.00	CK-NAC (IFCC) 30°C
	U/l	94	77	111	8.50	17.00	CK-NAC (IFCC) 25°C

PRESTIGE 24i

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Creatinine	μmol/l	123	98.6	147	12.20	24.40	Creatinine PAP method
	mg/dl	1.39	1.11	1.67	0.14	0.28	
Glucose	mmol/l	6.60	5.61	7.59	0.50	0.99	Glucose oxidase
	mg/dl	119	101	137	9.00	18.00	
HDL - Cholesterol	mmol/l	1.16	0.99	1.34	0.09	0.18	Direct HDL Immunoseparation
	mg/dl	44.8	38.0	51.6	3.40	6.80	
Iron	μmol/l	19.2	15.7	22.7	1.75	3.50	Colorimetric without ppt.
	μg/dl	107	87.8	126	9.60	19.20	
Magnesium	mmol/l	0.88	0.77	0.98	0.05	0.11	Xylidyl Blue
	mg/dl	2.13	1.88	2.38	0.13	0.25	
Phosphate Inorganic	mmol/l	1.38	1.18	1.58	0.10	0.20	Phosphomolybdate UV
	mg/dl	4.28	3.66	4.90	0.31	0.62	
Protein Total	g/l	60.8	48.7	72.9	6.05	12.10	Biuret reaction end point
	g/dl	6.08	4.87	7.29	0.61	1.21	
Triglycerides	mmol/l	1.10	0.92	1.28	0.09	0.18	Lipase/GPO-PAP no correction
	mg/dl	97.4	81.8	113	7.80	15.60	
Urea	mmol/l	7.30	6.20	8.40	0.55	1.10	Urease kinetic
	mg/dl	43.9	37.3	50.5	3.30	6.60	
	mmol/l	7.30	6.21	8.39	0.55	1.09	BUN
	mg/dl	20.5	17.4	23.6	1.55	3.10	
Uric Acid (Urate)	mmol/l	0.34	0.29	0.38	0.02	0.04	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.68	4.94	6.42	0.37	0.74	

Roche Cobas 6000 c501 e601

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Albumin	g/l	43.1	36.6	49.6	3.25	6.50	Bromocresol Green
	g/dl	4.31	3.66	4.96	0.33	0.65	
	g/l	43.5	37.0	50.0	3.25	6.50	Bromocresol Purple
	g/dl	4.35	3.70	5.00	0.33	0.65	
	g/l	39.3	33.4	45.2	2.95	5.90	Turbidimetric Assays
	g/dl	3.93	3.34	4.52	0.30	0.59	
Alkaline Phosphatase	U/l	138	118	158	10.00	20.00	Roche Integra AMP buffer 37°C
	U/l	108	92	124	8.00	16.00	Roche Integra AMP buffer 30°C
	U/l	88	75	101	6.50	13.00	Roche Integra AMP buffer 25°C
ALT (GPT)	U/l	34	27	41	3.50	7.00	Tris buffer without P5P 37°C
	U/l	25	20	30	2.50	5.00	Tris buffer without P5P 30°C
	U/l	19	15	23	2.00	4.00	Tris buffer without P5P 25°C
Amylase Pancreatic	U/l	58	50	66	4.00	8.00	Randox EPS Liquid and BM/Roche EPS Liquid 37°C
Amylase Total	U/l	83	70	96	6.50	13.00	BM/Roche Colorimetric pNPG7 37°C
	U/l	81	69	93	6.00	12.00	Roche Integra 2-chloro-pNPG7 37°C
	U/l	82	70	94	6.00	12.00	Other Roche 2-chloro-pNPG7 37°C
	U/l	82	69	95	6.50	13.00	Roche liquid stable pNPG7 37°C
AST (GOT)	U/l	33	27	39	3.00	6.00	Tris buffer without P5P 37°C
	U/l	22	18	26	2.00	4.00	Tris buffer without P5P 30°C
	U/l	16	13	19	1.50	3.00	Tris buffer without P5P 25°C
Bicarbonate	mmol/l	12.3	9.77	14.8	1.27	2.53	Colorimetric

Roche Cobas 6000 c501 e601

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Bicarbonate	mmol/l	13.4	10.6	16.2	1.40	2.80	Enzymatic
Bile Acids	μmol/l	26.3	21.0	31.6	2.65	5.30	Enzymatic Colorimetric
Bilirubin Direct	μmol/l	21.1	16.6	25.6	2.25	4.50	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.23	0.971	1.49	0.13	0.26	
	μmol/l	20.9	16.5	25.3	2.20	4.40	Diazo with Sulphanilic Acid
	mg/dl	1.22	0.965	1.48	0.13	0.26	
	μmol/l	15.1	11.9	18.3	1.60	3.20	Roche JG factored
	mg/dl	0.883	0.696	1.07	0.09	0.19	
Bilirubin Total	μmol/l	24.8	19.6	30.0	2.60	5.20	Diazo with Sulphanilic Acid
	mg/dl	1.45	1.15	1.75	0.15	0.30	
	μmol/l	24.4	19.2	29.6	2.60	5.20	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.43	1.12	1.74	0.16	0.31	
	μmol/l	24.8	19.6	30.0	2.60	5.20	Diazonium ion
	mg/dl	1.45	1.15	1.75	0.15	0.30	
Calcium	mmol/l	2.28	2.05	2.51	0.12	0.23	Cresolphthalein complexone
	mg/dl	9.14	8.22	10.1	0.46	0.92	
	mmol/l	2.27	2.04	2.50	0.12	0.23	NM-BAPTA
	mg/dl	9.10	8.18	10.0	0.46	0.92	
Chloride	mmol/l	92.9	85.4	100	3.75	7.50	ISE indirect
Cholesterol	mmol/l	4.08	3.55	4.61	0.27	0.53	Cholesterol Oxidase
	mg/dl	157	137	177	10.00	20.00	
Cholinesterase	U/l	5767	4614	6920	576.50	1153.00	Colorimetric Butyrylthiocholine 37°C
CK Total	U/l	227	186	268	20.50	41.00	CK-NAC substrate start (DGKC) 37°C
	U/l	142	116	168	13.00	26.00	CK-NAC substrate start (DGKC) 30°C
	U/l	96	79	113	8.50	17.00	CK-NAC substrate start (DGKC) 25°C

Roche Cobas 6000 c501 e601

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
CK Total	U/l	222	182	262	20.00	40.00	CK-NAC (IFCC) 37°C
	U/l	139	114	164	12.50	25.00	CK-NAC (IFCC) 30°C
	U/l	94	77	111	8.50	17.00	CK-NAC (IFCC) 25°C
Creatinine	μmol/l	124	99.5	149	12.25	24.50	Alkaline picrate no deproteinization
	mg/dl	1.40	1.12	1.68	0.14	0.28	
	μmol/l	130	104	156	13.00	26.00	Randox Enzymatic UV method
	mg/dl	1.47	1.18	1.76	0.15	0.29	
	μmol/l	127	102	152	12.50	25.00	Roche Creatinine Plus
	mg/dl	1.44	1.15	1.73	0.15	0.29	
	μmol/l	124	99.4	149	12.30	24.60	Jaffe rate blanked
	mg/dl	1.40	1.12	1.68	0.14	0.28	
	μmol/l	125	99.7	150	12.65	25.30	Jaffe rate blanked comp. (-26 μmol/l)
	mg/dl	1.41	1.13	1.69	0.14	0.28	
	μmol/l	124	99.3	149	12.35	24.70	Jaffe rate blanked compensated (-18 μmol/l)
	mg/dl	1.40	1.12	1.68	0.14	0.28	
D-3-Hydroxybutyrate	mmol/l	0.29	0.25	0.33	0.02	0.04	Tris buffer 100mmol pH 8.5
Free T4	pmol/l	17.1	12.8	21.4	2.15	4.30	Roche Cobas 6000/8000
	ng/dl	1.33	0.998	1.66	0.17	0.33	
	pg/ml	13.3	9.98	16.6	1.66	3.32	Roche Cobas 6000/8000
gamma-GT	U/l	50	43	57	3.50	7.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	39	34	44	2.50	5.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	31	27	35	2.00	4.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C
	U/l	56	48	64	4.00	8.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	44	38	50	3.00	6.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	35	30	40	2.50	5.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C

Roche Cobas 6000 c501 e601

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
gamma-GT	U/l	50	43	57	3.50	7.00	DCL gamma glutamyl-3-carboxy-4-nitroanilide 37°C
	U/l	39	34	44	2.50	5.00	DCL gamma glutamyl-3-carboxy-4-nitroanilide 30°C
	U/l	31	27	35	2.00	4.00	DCL gamma glutamyl-3-carboxy-4-nitroanilide 25°C
Glucose	mmol/l	6.21	5.27	7.15	0.47	0.94	Hexokinase
	mg/dl	112	95.0	129	8.50	17.00	
	mmol/l	6.26	5.32	7.20	0.47	0.94	Glucose oxidase
	mg/dl	113	95.9	130	8.55	17.10	
HDL - Cholesterol	mmol/l	1.07	0.91	1.23	0.08	0.16	Direct HDL PEGME
	mg/dl	41.3	35.2	47.4	3.05	6.10	
	mmol/l	1.06	0.90	1.22	0.08	0.16	Direct HDL Roche 3rd generation
	mg/dl	40.9	34.6	47.2	3.15	6.30	
Iron	µmol/l	19.4	15.9	22.9	1.75	3.50	Colorimetric with ppt.
	µg/dl	108	88.9	127	9.55	19.10	
	µmol/l	19.6	16.1	23.1	1.75	3.50	Colorimetric without ppt.
	µg/dl	110	90.0	130	10.00	20.00	
Lactate	mmol/l	1.49	1.22	1.76	0.14	0.27	Colorimetric Lactate Oxidase
	mg/dl	13.4	11.0	15.8	1.20	2.40	
LD (LDH)	U/l	376	320	432	28.00	56.00	P->L German methods 37°C
	U/l	271	231	311	20.00	40.00	P->L German methods 30°C
	U/l	191	162	220	14.50	29.00	P->L German methods 25°C
	U/l	237	202	272	17.50	35.00	L->P IFCC 37°C
	U/l	171	146	196	12.50	25.00	L->P IFCC 30°C
	U/l	120	102	138	9.00	18.00	L->P IFCC 25°C
Lipase	U/l	34	27	41	3.50	7.00	Roche Colorimetric 37°C
Lithium	mmol/l	0.99	0.87	1.11	0.06	0.12	Spectrophotometric
	mg/dl	0.690	0.607	0.773	0.04	0.08	

Roche Cobas 6000 c501 e601

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Magnesium	mmol/l	0.90	0.80	1.01	0.05	0.11	Xylidyl Blue
	mg/dl	2.20	1.93	2.47	0.14	0.27	
	mmol/l	0.89	0.78	0.99	0.05	0.11	Chlorphosphonazo III
	mg/dl	2.15	1.90	2.40	0.13	0.25	
Osmolality	mOsm/kg	289	231	347	29.00	58.00	Calculated
Phosphate Inorganic	mmol/l	1.36	1.16	1.56	0.10	0.20	Phosphomolybdate enzymatic
	mg/dl	4.22	3.60	4.84	0.31	0.62	
	mmol/l	1.35	1.14	1.56	0.11	0.21	Phosphomolybdate UV
	mg/dl	4.19	3.53	4.85	0.33	0.66	
Potassium	mmol/l	4.00	3.68	4.32	0.16	0.32	ISE method - indirect
Protein Total	g/l	59.0	47.2	70.8	5.90	11.80	Biuret reaction end point
	g/dl	5.90	4.72	7.08	0.59	1.18	
	g/l	58.8	47.1	70.5	5.85	11.70	Biuret reaction kinetic
	g/dl	5.88	4.71	7.05	0.59	1.17	
PSA Total	ng/ml =	13.9	10.5	17.3	1.70	3.40	Roche Cobas 6000/8000
Sodium	mmol/l	142	135	149	3.50	7.00	ISE method - indirect
Thyroid Stimulating Hormone	μU/ml =	1.61	1.29	1.93	0.16	0.32	Roche Cobas 6000/8000
TIBC	μmol/l	42.0	33.2	50.8	4.40	8.80	FE+UIBC(saturation with iron)
	μg/dl	235	186	284	24.50	49.00	
	μmol/l	44.3	35.0	53.6	4.65	9.30	Direct Colorimetric
	μg/dl	248	196	300	26.00	52.00	
Triglycerides	mmol/l	1.09	0.92	1.26	0.09	0.17	Lipase/GPO-PAP no correction
	mg/dl	96.5	81.2	112	7.65	15.30	
	mmol/l	1.07	0.90	1.24	0.09	0.17	Lipase/GPO-PAP 0.11mmol/l correction
	mg/dl	94.7	79.6	110	7.55	15.10	

Roche Cobas 6000 c501 e601

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Triglycerides	mmol/l	1.09	0.91	1.27	0.09	0.18	L/G Kinase EP. no correction
	mg/dl	96.5	80.7	112	7.90	15.80	
Urea	mmol/l	7.13	6.06	8.20	0.54	1.07	Urease kinetic
	mg/dl	42.9	36.4	49.4	3.25	6.50	
	mmol/l	7.13	6.06	8.20	0.54	1.07	BUN
	mg/dl	20.0	17.0	23.0	1.50	3.00	
Uric Acid (Urate)	mmol/l	0.34	0.29	0.38	0.02	0.04	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.64	4.91	6.37	0.37	0.73	
	mmol/l	0.34	0.29	0.38	0.02	0.04	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.66	4.92	6.40	0.37	0.74	
	mmol/l	0.34	0.30	0.38	0.02	0.04	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.70	4.96	6.44	0.37	0.74	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Albumin	g/l	43.2	36.7	49.7	3.25	6.50	Bromocresol Green
	g/dl	4.32	3.67	4.97	0.33	0.65	
Alkaline Phosphatase	U/l	133	113	153	10.00	20.00	Roche Integra AMP buffer 37°C
	U/l	104	88	120	8.00	16.00	Roche Integra AMP buffer 30°C
	U/l	85	72	98	6.50	13.00	Roche Integra AMP buffer 25°C
ALT (GPT)	U/l	35	28	42	3.50	7.00	Tris buffer without P5P 37°C
	U/l	26	21	31	2.50	5.00	Tris buffer without P5P 30°C
	U/l	20	16	24	2.00	4.00	Tris buffer without P5P 25°C
Amylase Total	U/l	83	71	95	6.00	12.00	Roche liquid stable pNPG7 37°C
AST (GOT)	U/l	35	28	42	3.50	7.00	Tris buffer without P5P 37°C
	U/l	24	19	29	2.50	5.00	Tris buffer without P5P 30°C
	U/l	17	13	21	2.00	4.00	Tris buffer without P5P 25°C
Bicarbonate	mmol/l	13.4	10.6	16.2	1.40	2.80	Enzymatic
Bilirubin Direct	µmol/l	20.2	16.0	24.4	2.10	4.20	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.18	0.936	1.42	0.12	0.24	
Bilirubin Total	µmol/l	26.2	20.7	31.7	2.75	5.50	Diazo with Sulphanilic Acid
	mg/dl	1.53	1.21	1.85	0.16	0.32	
	µmol/l	25.6	20.2	31.0	2.70	5.40	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.50	1.18	1.82	0.16	0.32	
	µmol/l	25.6	20.2	31.0	2.70	5.40	Diazonium ion
	mg/dl	1.50	1.18	1.82	0.16	0.32	

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Calcium	mmol/l	2.28	2.05	2.51	0.12	0.23	Cresolphthalein complexone
	mg/dl	9.14	8.22	10.1	0.46	0.92	
Chloride	mmol/l	98.0	90.1	106	3.95	7.90	ISE indirect
Cholesterol	mmol/l	4.10	3.57	4.63	0.27	0.53	Cholesterol Oxidase
	mg/dl	158	138	178	10.00	20.00	
CK Total	U/l	225	185	265	20.00	40.00	CK-NAC (IFCC) 37°C
	U/l	141	116	166	12.50	25.00	CK-NAC (IFCC) 30°C
	U/l	96	79	113	8.50	17.00	CK-NAC (IFCC) 25°C
Creatinine	µmol/l	115	92.4	138	11.30	22.60	Alkaline picrate no deproteinization
	mg/dl	1.30	1.04	1.56	0.13	0.26	
	µmol/l	119	95.2	143	11.90	23.80	Roche Creatinine Plus
	mg/dl	1.34	1.08	1.60	0.13	0.26	
	µmol/l	117	93.8	140	11.60	23.20	Jaffe rate blanked compensated (-18 µmol/l)
	mg/dl	1.32	1.06	1.58	0.13	0.26	
gamma-GT	U/l	56	47	65	4.50	9.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	44	37	51	3.50	7.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	35	29	41	3.00	6.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
Glucose	mmol/l	6.38	5.42	7.34	0.48	0.96	Hexokinase
	mg/dl	115	97.7	132	8.65	17.30	
	mmol/l	6.34	5.39	7.29	0.48	0.95	Glucose oxidase
	mg/dl	114	97.1	131	8.45	16.90	
HDL - Cholesterol	mmol/l	1.10	0.94	1.27	0.08	0.17	Direct HDL Roche 3rd generation
	mg/dl	42.5	36.1	48.9	3.20	6.40	
LD (LDH)	U/l	255	217	293	19.00	38.00	L->P IFCC 37°C
	U/l	184	157	211	13.50	27.00	L->P IFCC 30°C
	U/l	129	110	148	9.50	19.00	L->P IFCC 25°C

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ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Magnesium	mmol/l	0.90	0.80	1.01	0.05	0.11	Chlorphosphonazo III
	mg/dl	2.19	1.93	2.45	0.13	0.26	
Phosphate Inorganic	mmol/l	1.41	1.20	1.62	0.11	0.21	Phosphomolybdate enzymatic
	mg/dl	4.37	3.72	5.02	0.33	0.65	
	mmol/l	1.42	1.21	1.63	0.11	0.21	Phosphomolybdate UV
	mg/dl	4.40	3.75	5.05	0.33	0.65	
Potassium	mmol/l	3.98	3.66	4.30	0.16	0.32	ISE method - indirect
Protein Total	g/l	59.2	47.4	71.0	5.90	11.80	Biuret reaction end point
	g/dl	5.92	4.74	7.10	0.59	1.18	
Sodium	mmol/l	140	133	147	3.50	7.00	ISE method - indirect
Triglycerides	mmol/l	1.11	0.94	1.28	0.09	0.17	Lipase/GPO-PAP no correction
	mg/dl	98.2	82.8	114	7.70	15.40	
	mmol/l	1.08	0.91	1.25	0.09	0.17	Lipase/GPO-PAP 0.11mmol/l correction
	mg/dl	95.6	80.3	111	7.65	15.30	
Urea	mmol/l	7.13	6.06	8.20	0.54	1.07	Urease kinetic
	mg/dl	42.9	36.4	49.4	3.25	6.50	
	mmol/l	7.61	6.47	8.75	0.57	1.14	Urease hypochlorite
	mg/dl	45.7	38.9	52.5	3.40	6.80	
	mmol/l	7.13	6.06	8.20	0.54	1.07	BUN
	mg/dl	20.0	17.0	23.0	1.50	3.00	
	mmol/l	0.34	0.29	0.38	0.02	0.04	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.66	4.92	6.40	0.37	0.74	
Uric Acid (Urate)	mmol/l	0.34	0.29	0.38	0.02	0.04	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.66	4.92	6.40	0.37	0.74	

Roche Cobas C111®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Uric Acid (Urate)	mmol/l	0.34	0.30	0.39	0.02	0.05	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.78	5.02	6.54	0.38	0.76	

Roche Cobas C311®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Albumin	g/l	43.4	36.9	49.9	3.25	6.50	Bromocresol Green
	g/dl	4.34	3.69	4.99	0.33	0.65	
	g/l	43.4	36.9	49.9	3.25	6.50	Bromocresol Purple
	g/dl	4.34	3.69	4.99	0.33	0.65	
Alkaline Phosphatase	U/l	283	240	326	21.50	43.00	Diethanolamine buffer DEA 37°C
	U/l	220	187	253	16.50	33.00	Diethanolamine buffer DEA 30°C
	U/l	181	153	209	14.00	28.00	Diethanolamine buffer DEA 25°C
	U/l	136	115	157	10.50	21.00	Roche Integra AMP buffer 37°C
	U/l	106	90	122	8.00	16.00	Roche Integra AMP buffer 30°C
	U/l	87	73	101	7.00	14.00	Roche Integra AMP buffer 25°C
	U/l	135	115	155	10.00	20.00	AMP optimised to IFCC 37°C
	U/l	105	90	120	7.50	15.00	AMP optimised to IFCC 30°C
ALT (GPT)	U/l	86	73	99	6.50	13.00	AMP optimised to IFCC 25°C
	U/l	35	28	42	3.50	7.00	Tris buffer without P5P 37°C
	U/l	26	21	31	2.50	5.00	Tris buffer without P5P 30°C
Amylase Total	U/l	20	16	24	2.00	4.00	Tris buffer without P5P 25°C
	U/l	83	70	96	6.50	13.00	Roche liquid stable pNPG7 37°C
AST (GOT)	U/l	35	28	42	3.50	7.00	Tris buffer without P5P 37°C
	U/l	24	19	29	2.50	5.00	Tris buffer without P5P 30°C
	U/l	17	13	21	2.00	4.00	Tris buffer without P5P 25°C
Bicarbonate	mmol/l	13.5	10.7	16.3	1.40	2.80	Enzymatic

Roche Cobas C311®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Bilirubin Direct	µmol/l	22.0	17.4	26.6	2.30	4.60	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.29	1.02	1.56	0.14	0.27	
Bilirubin Total	µmol/l	24.8	19.6	30.0	2.60	5.20	Diazo with Sulphanilic Acid
	mg/dl	1.45	1.15	1.75	0.15	0.30	
	µmol/l	24.6	19.4	29.8	2.60	5.20	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.44	1.13	1.75	0.16	0.31	
	µmol/l	24.7	19.5	29.9	2.60	5.20	Diazonium ion
	mg/dl	1.44	1.14	1.74	0.15	0.30	
Calcium	mmol/l	2.31	2.08	2.54	0.12	0.23	Cresolphthalein complexone
	mg/dl	9.26	8.34	10.2	0.46	0.92	
	mmol/l	2.29	2.06	2.52	0.12	0.23	NM-BAPTA
	mg/dl	9.18	8.26	10.1	0.46	0.92	
Chloride	mmol/l	93.0	85.6	100	3.70	7.40	ISE indirect
Cholesterol	mmol/l	4.09	3.56	4.62	0.27	0.53	Cholesterol Oxidase
	mg/dl	158	137	179	10.50	21.00	
CK Total	U/l	225	185	265	20.00	40.00	CK-NAC substrate start (DGKC) 37°C
	U/l	141	116	166	12.50	25.00	CK-NAC substrate start (DGKC) 30°C
	U/l	96	79	113	8.50	17.00	CK-NAC substrate start (DGKC) 25°C
	U/l	225	184	266	20.50	41.00	CK-NAC (IFCC) 37°C
	U/l	141	115	167	13.00	26.00	CK-NAC (IFCC) 30°C
	U/l	96	78	114	9.00	18.00	CK-NAC (IFCC) 25°C
Creatinine	µmol/l	126	101	151	12.50	25.00	Alkaline picrate no deproteinization
	mg/dl	1.42	1.14	1.70	0.14	0.28	
	µmol/l	129	104	154	12.50	25.00	Roche Creatinine Plus
	mg/dl	1.46	1.18	1.74	0.14	0.28	

Roche Cobas C311®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Creatinine	μmol/l	127	102	152	12.50	25.00	Jaffe rate blanked comp. (-26 μmol/l)
	mg/dl	1.44	1.15	1.73	0.15	0.29	
gamma-GT	U/l	51	44	58	3.50	7.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	40	35	45	2.50	5.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	31	27	35	2.00	4.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C
	U/l	57	48	66	4.50	9.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	45	38	52	3.50	7.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	35	30	40	2.50	5.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
Glucose	mmol/l	6.28	5.34	7.22	0.47	0.94	Hexokinase
	mg/dl	113	96.2	130	8.40	16.80	
	mmol/l	6.23	5.30	7.16	0.47	0.93	Glucose oxidase
	mg/dl	112	95.5	129	8.25	16.50	
HDL - Cholesterol	mmol/l	1.04	0.89	1.20	0.08	0.16	Direct HDL Roche 3rd generation
	mg/dl	40.1	34.2	46.0	2.95	5.90	
Iron	μmol/l	19.4	15.9	22.9	1.75	3.50	Colorimetric without ppt.
	μg/dl	108	88.9	127	9.55	19.10	
Lactate	mmol/l	1.52	1.24	1.80	0.14	0.28	Colorimetric Lactate Oxidase
	mg/dl	13.7	11.2	16.2	1.25	2.50	
LD (LDH)	U/l	374	318	430	28.00	56.00	P->L German methods 37°C
	U/l	270	230	310	20.00	40.00	P->L German methods 30°C
	U/l	190	161	219	14.50	29.00	P->L German methods 25°C
	U/l	236	201	271	17.50	35.00	L->P IFCC 37°C
	U/l	170	145	195	12.50	25.00	L->P IFCC 30°C
	U/l	120	102	138	9.00	18.00	L->P IFCC 25°C
Lipase	U/l	34	27	41	3.50	7.00	Roche Colorimetric 37°C

Roche Cobas C311®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Magnesium	mmol/l	0.91	0.80	1.02	0.05	0.11	Xylidyl Blue
	mg/dl	2.22	1.95	2.49	0.14	0.27	
	mmol/l	0.90	0.79	1.00	0.05	0.11	Chlorphosphonazo III
	mg/dl	2.17	1.91	2.43	0.13	0.26	
Phosphate Inorganic	mmol/l	1.37	1.16	1.58	0.11	0.21	Phosphomolybdate UV
	mg/dl	4.25	3.60	4.90	0.33	0.65	
Potassium	mmol/l	4.01	3.68	4.34	0.17	0.33	ISE method - indirect
Protein Total	g/l	59.5	47.6	71.4	5.95	11.90	Biuret reaction end point
	g/dl	5.95	4.76	7.14	0.60	1.19	
Sodium	mmol/l	142	135	149	3.50	7.00	ISE method - indirect
TIBC	µmol/l	41.0	32.4	49.6	4.30	8.60	FE+UIBC(saturation with iron)
	µg/dl	229	181	277	24.00	48.00	
Triglycerides	mmol/l	1.10	0.93	1.27	0.09	0.17	Lipase/GPO-PAP no correction
	mg/dl	97.4	82.0	113	7.70	15.40	
	mmol/l	1.06	0.89	1.23	0.08	0.17	Lipase/GPO-PAP 0.11mmol/l correction
	mg/dl	93.8	79.0	109	7.40	14.80	
Urea	mmol/l	7.30	6.20	8.40	0.55	1.10	Urease kinetic
	mg/dl	43.9	37.3	50.5	3.30	6.60	
	mmol/l	7.30	6.21	8.39	0.55	1.09	BUN
	mg/dl	20.5	17.4	23.6	1.55	3.10	
Uric Acid (Urate)	mmol/l	0.34	0.30	0.39	0.02	0.05	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.76	5.01	6.51	0.38	0.75	
	mmol/l	0.35	0.30	0.39	0.02	0.05	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.80	5.04	6.56	0.38	0.76	
	mmol/l	0.34	0.30	0.39	0.02	0.04	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.75	5.01	6.49	0.37	0.74	

Roche Cobas c701 / c702 / c711

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Albumin	g/l	42.5	36.1	48.9	3.20	6.40	Bromocresol Green
	g/dl	4.25	3.61	4.89	0.32	0.64	
Alkaline Phosphatase	U/l	123	105	141	9.00	18.00	Roche Integra AMP buffer 37°C
	U/l	96	82	110	7.00	14.00	Roche Integra AMP buffer 30°C
	U/l	79	67	91	6.00	12.00	Roche Integra AMP buffer 25°C
ALT (GPT)	U/l	35	28	42	3.50	7.00	Tris buffer without P5P 37°C
	U/l	26	21	31	2.50	5.00	Tris buffer without P5P 30°C
	U/l	20	16	24	2.00	4.00	Tris buffer without P5P 25°C
Amylase Pancreatic	U/l	60	51	69	4.50	9.00	Randox EPS Liquid and BM/Roche EPS Liquid 37°C
Amylase Total	U/l	82	69	95	6.50	13.00	BM/Roche Colorimetric pNPG7 37°C
	U/l	81	69	93	6.00	12.00	Roche liquid stable pNPG7 37°C
AST (GOT)	U/l	35	28	42	3.50	7.00	Tris buffer without P5P 37°C
	U/l	24	19	29	2.50	5.00	Tris buffer without P5P 30°C
	U/l	17	13	21	2.00	4.00	Tris buffer without P5P 25°C
Bicarbonate	mmol/l	13.2	10.5	15.9	1.35	2.70	Enzymatic
Bilirubin Direct	µmol/l	21.4	16.9	25.9	2.25	4.50	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.25	0.989	1.51	0.13	0.26	
Bilirubin Total	µmol/l	23.7	18.7	28.7	2.50	5.00	Diazo with Sulphanilic Acid
	mg/dl	1.39	1.09	1.69	0.15	0.30	
	µmol/l	23.9	18.9	28.9	2.50	5.00	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.40	1.11	1.69	0.15	0.29	

Roche Cobas c701 / c702 / c711

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Bilirubin Total	μmol/l	23.3	18.4	28.2	2.45	4.90	Diazonium ion
	mg/dl	1.36	1.08	1.64	0.14	0.28	
Calcium	mmol/l	2.22	2.00	2.44	0.11	0.22	Cresolphthalein complexone
	mg/dl	8.90	8.02	9.78	0.44	0.88	
	mmol/l	2.22	2.00	2.44	0.11	0.22	NM-BAPTA
	mg/dl	8.90	8.02	9.78	0.44	0.88	
Chloride	mmol/l	93.8	86.3	101	3.75	7.50	ISE indirect
Cholesterol	mmol/l	3.97	3.45	4.49	0.26	0.52	Cholesterol Oxidase
	mg/dl	153	133	173	10.00	20.00	
CK Total	U/l	198	163	233	17.50	35.00	CK-NAC (IFCC) 37°C
	U/l	124	102	146	11.00	22.00	CK-NAC (IFCC) 30°C
	U/l	84	69	99	7.50	15.00	CK-NAC (IFCC) 25°C
Creatinine	μmol/l	133	106	160	13.50	27.00	Roche Creatinine Plus
	mg/dl	1.50	1.20	1.80	0.15	0.30	
	μmol/l	128	102	154	13.00	26.00	Jaffe rate blanked comp. (-26 μmol/l)
	mg/dl	1.45	1.15	1.75	0.15	0.30	
gamma-GT	U/l	50	43	57	3.50	7.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	39	34	44	2.50	5.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	31	27	35	2.00	4.00	Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C
	U/l	53	45	61	4.00	8.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	42	35	49	3.50	7.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	33	28	38	2.50	5.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
Glucose	mmol/l	6.13	5.21	7.05	0.46	0.92	Hexokinase
	mg/dl	110	93.9	126	8.05	16.10	
HDL - Cholesterol	mmol/l	1.06	0.90	1.22	0.08	0.16	Direct HDL PEGME
	mg/dl	40.9	34.6	47.2	3.15	6.30	

Roche Cobas c701 / c702 / c711

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
HDL - Cholesterol	mmol/l	1.00	0.85	1.15	0.07	0.15	Direct HDL Roche 3rd generation
	mg/dl	38.6	32.8	44.4	2.90	5.80	
Iron	µmol/l	19.0	15.6	22.4	1.70	3.40	Colorimetric without ppt.
	µg/dl	106	87.2	125	9.40	18.80	
Lactate	mmol/l	1.48	1.21	1.75	0.14	0.27	Colorimetric Lactate Oxidase
	mg/dl	13.3	10.9	15.7	1.20	2.40	
LD (LDH)	U/l	233	198	268	17.50	35.00	L->P IFCC 37°C
	U/l	168	143	193	12.50	25.00	L->P IFCC 30°C
	U/l	118	100	136	9.00	18.00	L->P IFCC 25°C
Lipase	U/l	33	27	39	3.00	6.00	Roche Colorimetric 37°C
Magnesium	mmol/l	0.89	0.79	1.00	0.05	0.11	Xylidyl Blue
	mg/dl	2.17	1.91	2.43	0.13	0.26	
Phosphate Inorganic	mmol/l	1.32	1.12	1.52	0.10	0.20	Phosphomolybdate UV
	mg/dl	4.09	3.47	4.71	0.31	0.62	
Potassium	mmol/l	4.00	3.68	4.32	0.16	0.32	ISE method - indirect
Protein Total	g/l	58.9	47.1	70.7	5.90	11.80	Biuret reaction end point
	g/dl	5.89	4.71	7.07	0.59	1.18	
Sodium	mmol/l	143	136	150	3.50	7.00	ISE method - indirect
TIBC	µmol/l	43.2	34.1	52.3	4.55	9.10	FE+UIBC(saturation with iron)
	µg/dl	241	191	291	25.00	50.00	
Triglycerides	mmol/l	1.08	0.91	1.25	0.09	0.17	Lipase/GPO-PAP no correction
	mg/dl	95.6	80.2	111	7.70	15.40	
	mmol/l	1.08	0.91	1.26	0.09	0.18	L/G Kinase EP. no correction
	mg/dl	95.6	80.1	111	7.75	15.50	

Roche Cobas c701 / c702 / c711

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Urea	mmol/l	6.97	5.92	8.02	0.53	1.05	Urease kinetic
	mg/dl	41.9	35.6	48.2	3.15	6.30	
	mmol/l	6.97	5.92	8.02	0.53	1.05	BUN
	mg/dl	19.6	16.7	22.5	1.45	2.90	
Uric Acid (Urate)	mmol/l	0.35	0.30	0.39	0.02	0.05	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.81	5.06	6.56	0.38	0.75	
	mmol/l	0.33	0.28	0.37	0.02	0.04	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.46	4.75	6.17	0.36	0.71	
	mmol/l	0.33	0.29	0.37	0.02	0.04	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.54	4.82	6.26	0.36	0.72	

RX DAYTONA®/IMOLA®/SUZUKA®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Albumin	g/l	41.4	35.2	47.6	3.10	6.20	Bromocresol Green
	g/dl	4.14	3.52	4.76	0.31	0.62	
Alkaline Phosphatase	U/l	299	254	344	22.50	45.00	Diethanolamine buffer DEA 37°C
	U/l	182	155	209	13.50	27.00	AMP optimised to IFCC 37°C
ALT (GPT)	U/l	36	29	43	3.50	7.00	Tris buffer without P5P 37°C
Amylase Pancreatic	U/l	68	58	78	5.00	10.00	Randox liquid stable pNPG7 37°C
Amylase Total	U/l	92	78	106	7.00	14.00	Randox liquid stable pNPG7 37°C
AST (GOT)	U/l	38	30	46	4.00	8.00	Tris buffer without P5P 37°C
Bicarbonate	mmol/l	12.4	9.83	15.0	1.29	2.57	Enzymatic
Bile Acids	µmol/l	27.2	21.8	32.6	2.70	5.40	5th Generation Colorimetric
Bilirubin Direct	µmol/l	20.9	16.5	25.3	2.20	4.40	Diazo with Sulphanilic Acid
	mg/dl	1.22	0.965	1.48	0.13	0.26	
Bilirubin Total	µmol/l	31.1	24.6	37.6	3.25	6.50	Diazo with Sulphanilic Acid
	mg/dl	1.82	1.44	2.20	0.19	0.38	
Calcium	mmol/l	2.32	2.09	2.55	0.12	0.23	Arsenazo III
	mg/dl	9.30	8.38	10.2	0.46	0.92	
Chloride	mmol/l	97.9	90.1	106	3.90	7.80	ISE direct
Cholesterol	mmol/l	4.08	3.55	4.61	0.27	0.53	Cholesterol Oxidase
	mg/dl	157	137	177	10.00	20.00	
CK Total	U/l	215	176	254	19.50	39.00	CK-NAC substrate start (DGKC) 37°C
	U/l	233	191	275	21.00	42.00	CK-NAC (IFCC) 37°C

RX DAYTONA®/IMOLA®/SUZUKA®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Creatinine	μmol/l	123	98.1	148	12.45	24.90	Alkaline picrate no deproteinization
	mg/dl	1.39	1.11	1.67	0.14	0.28	
gamma-GT	U/l	58	49	67	4.50	9.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
Glucose	mmol/l	6.35	5.40	7.30	0.48	0.95	Hexokinase
	mg/dl	114	97.3	131	8.35	16.70	
	mmol/l	6.52	5.54	7.50	0.49	0.98	Glucose oxidase
	mg/dl	117	99.8	134	8.60	17.20	
Iron	μmol/l	20.4	16.7	24.1	1.85	3.70	Colorimetric without ppt.
	μg/dl	114	93.4	135	10.30	20.60	
Lactate	mmol/l	1.47	1.21	1.73	0.13	0.26	Enzymatic Colorimetric
	mg/dl	13.2	10.9	15.5	1.15	2.30	
LD (LDH)	U/l	451	383	519	34.00	68.00	P->L German methods 37°C
	U/l	271	230	312	20.50	41.00	L->P IFCC 37°C
Lipase	U/l	42	34	50	4.00	8.00	Randox Colorimetric 37°C
Lithium	mmol/l	0.94	0.83	1.06	0.06	0.11	Colorimetric
	mg/dl	0.655	0.576	0.734	0.04	0.08	
Magnesium	mmol/l	0.93	0.82	1.04	0.06	0.11	Xylidyl Blue
	mg/dl	2.26	1.99	2.53	0.14	0.27	
Phosphate Inorganic	mmol/l	1.38	1.17	1.59	0.11	0.21	Phosphomolybdate UV
	mg/dl	4.28	3.63	4.93	0.33	0.65	
Potassium	mmol/l	4.07	3.74	4.40	0.17	0.33	ISE method - direct
	mmol/l	3.92	3.61	4.23	0.16	0.31	Enzymatic
Protein Total	g/l	59.4	47.5	71.3	5.95	11.90	Biuret reaction end point
	g/dl	5.94	4.75	7.13	0.60	1.19	
Sodium	mmol/l	143	136	150	3.50	7.00	ISE method - direct

RX DAYTONA®/IMOLA®/SUZUKA®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Sodium	mmol/l	143	136	150	3.50	7.00	Enzymatic
TIBC	μmol/l	45.7	36.1	55.3	4.80	9.60	Direct Colorimetric
	μg/dl	255	202	308	26.50	53.00	
Triglycerides	mmol/l	1.14	0.96	1.32	0.09	0.18	Lipase/GPO-PAP no correction
	mg/dl	101	84.6	117	8.20	16.40	
Urea	mmol/l	7.21	6.13	8.29	0.54	1.08	Urease kinetic
	mg/dl	43.3	36.8	49.8	3.25	6.50	
	mmol/l	7.21	6.13	8.29	0.54	1.08	BUN
	mg/dl	20.2	17.2	23.2	1.50	3.00	
Uric Acid (Urate)	mmol/l	0.33	0.29	0.38	0.02	0.04	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.58	4.86	6.30	0.36	0.72	
	mmol/l	0.34	0.30	0.39	0.02	0.04	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.75	5.01	6.49	0.37	0.74	

SIEMENS ADVIA 1200/1650/2400®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Albumin	g/l	40.8	34.6	47.0	3.10	6.20	Bromocresol Green
	g/dl	4.08	3.46	4.70	0.31	0.62	
Alkaline Phosphatase	U/l	181	154	208	13.50	27.00	AMP optimised to IFCC 37°C
	U/l	187	159	215	14.00	28.00	AMP non-optimised 37°C
ALT (GPT)	U/l	38	30	46	4.00	8.00	Tris buffer without P5P 37°C
Amylase Pancreatic	U/l	61	52	70	4.50	9.00	Immunoinhibition EPS substrate 37°C
Amylase Total	U/l	81	69	93	6.00	12.00	Siemens - blocked pNPG7 37°C
AST (GOT)	U/l	37	30	44	3.50	7.00	Tris buffer without P5P 37°C
Bicarbonate	mmol/l	15.2	12.0	18.4	1.60	3.20	Enzymatic
Bilirubin Direct	µmol/l	19.3	15.2	23.4	2.05	4.10	Diazo with Sulphanilic Acid
	mg/dl	1.13	0.889	1.37	0.12	0.24	
	µmol/l	19.9	15.7	24.1	2.10	4.20	Oxidation to Biliverdin
	mg/dl	1.16	0.918	1.40	0.12	0.24	
Bilirubin Total	µmol/l	29.4	23.2	35.6	3.10	6.20	Diazo with Sulphanilic Acid
	mg/dl	1.72	1.36	2.08	0.18	0.36	
	µmol/l	29.8	23.5	36.1	3.15	6.30	Oxidation to Biliverdin
	mg/dl	1.74	1.37	2.11	0.19	0.37	
Calcium	mmol/l	2.27	2.04	2.50	0.12	0.23	Cresolphthalein complexone
	mg/dl	9.10	8.18	10.0	0.46	0.92	
	mmol/l	2.29	2.06	2.52	0.12	0.23	Arsenazo III
	mg/dl	9.18	8.26	10.1	0.46	0.92	

SIEMENS ADVIA 1200/1650/2400®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Chloride	mmol/l	98.7	90.8	107	3.95	7.90	ISE indirect
Cholesterol	mmol/l	4.01	3.49	4.53	0.26	0.52	Cholesterol Oxidase
	mg/dl	155	135	175	10.00	20.00	
Cholinesterase	U/l	6176	4940	7412	618.00	1236.00	Colorimetric Butyrylthiocholine 37°C
CK Total	U/l	217	178	256	19.50	39.00	CK-NAC substrate start (DGKC) 37°C
	U/l	208	171	245	18.50	37.00	CK-NAC (IFCC) 37°C
Creatinine	µmol/l	128	103	153	12.50	25.00	Alkaline picrate no deproteinization
	mg/dl	1.45	1.16	1.74	0.15	0.29	
	µmol/l	120	95.8	144	12.10	24.20	Randox Enzymatic UV method
	mg/dl	1.36	1.08	1.64	0.14	0.28	
	µmol/l	125	100	150	12.50	25.00	Jaffe rate blanked
	mg/dl	1.41	1.13	1.69	0.14	0.28	
	µmol/l	124	99.3	149	12.35	24.70	Jaffe rate blanked comp. (-26 µmol/l)
	mg/dl	1.40	1.12	1.68	0.14	0.28	
gamma-GT	U/l	57	48	66	4.50	9.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
Glucose	mmol/l	6.24	5.31	7.17	0.47	0.93	Hexokinase
	mg/dl	112	95.7	128	8.15	16.30	
	mmol/l	6.31	5.36	7.26	0.48	0.95	Glucose oxidase
	mg/dl	114	96.6	131	8.70	17.40	
HDL - Cholesterol	mmol/l	1.08	0.92	1.24	0.08	0.16	Direct HDL Immunoseparation
	mg/dl	41.7	35.5	47.9	3.10	6.20	
	mmol/l	1.00	0.85	1.15	0.07	0.15	Direct Clearance Method
	mg/dl	38.4	32.7	44.1	2.85	5.70	
Iron	µmol/l	19.3	15.8	22.8	1.75	3.50	Colorimetric without ppt.
	µg/dl	108	88.3	128	9.85	19.70	

SIEMENS ADVIA 1200/1650/2400®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Lactate	mmol/l	1.37	1.12	1.62	0.13	0.25	Colorimetric Lactate Oxidase
	mg/dl	12.3	10.1	14.5	1.10	2.20	
LD (LDH)	U/l	252	214	290	19.00	38.00	L->P 37°C
	U/l	415	352	478	31.50	63.00	P->L German methods 37°C
	U/l	254	216	292	19.00	38.00	L->P IFCC 37°C
Lipase	U/l	42	34	50	4.00	8.00	Other Colorimetric 37°C
Lithium	mmol/l	1.00	0.88	1.12	0.06	0.12	Spectrophotometric
	mg/dl	0.694	0.614	0.774	0.04	0.08	
Magnesium	mmol/l	0.93	0.82	1.04	0.06	0.11	Xylidyl Blue
	mg/dl	2.25	1.98	2.52	0.14	0.27	
Phosphate Inorganic	mmol/l	1.35	1.15	1.55	0.10	0.20	Phosphomolybdate UV
	mg/dl	4.19	3.57	4.81	0.31	0.62	
Potassium	mmol/l	4.05	3.73	4.37	0.16	0.32	ISE method - indirect
Protein Total	g/l	59.4	47.6	71.2	5.90	11.80	Biuret reaction end point
	g/dl	5.94	4.76	7.12	0.59	1.18	
Sodium	mmol/l	144	136	152	4.00	8.00	ISE method - indirect
TIBC	µmol/l	47.1	37.2	57.0	4.95	9.90	Removal of excess free iron
	µg/dl	263	208	318	27.50	55.00	
	µmol/l	45.0	35.6	54.4	4.70	9.40	FE+UIBC(saturation with iron)
	µg/dl	252	199	305	26.50	53.00	
Triglycerides	mmol/l	1.14	0.96	1.33	0.09	0.19	Lipase/GPO-PAP no correction
	mg/dl	101	84.5	118	8.25	16.50	
	mmol/l	1.15	0.97	1.33	0.09	0.18	L/G Kinase EP. no correction
	mg/dl	102	85.7	118	8.15	16.30	
Urea	mmol/l	7.58	6.45	8.71	0.57	1.13	Urease kinetic
	mg/dl	45.6	38.8	52.4	3.40	6.80	

SIEMENS ADVIA 1200/1650/2400®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Urea	mmol/l	7.58	6.44	8.72	0.57	1.14	BUN
	mg/dl	21.3	18.1	24.5	1.60	3.20	
Uric Acid (Urate)	mmol/l	0.35	0.30	0.39	0.02	0.05	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.83	5.07	6.59	0.38	0.76	
	mmol/l	0.35	0.30	0.39	0.02	0.05	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.81	5.06	6.56	0.38	0.75	

SIEMENS DIMENSION RxL/Max/Xpand®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Albumin	g/l	44.2	37.5	50.9	3.35	6.70	Bromocresol Green
	g/dl	4.42	3.75	5.09	0.34	0.67	
	g/l	43.8	37.2	50.4	3.30	6.60	Bromocresol Purple
	g/dl	4.38	3.72	5.04	0.33	0.66	
Alkaline Phosphatase	U/l	136	116	156	10.00	20.00	Siemens Dimension AMP buffer 37°C
ALT (GPT)	U/l	43	34	52	4.50	9.00	Tris buffer with P5P 37°C
	U/l	52	42	62	5.00	10.00	Siemens Dade Standard Non IFCC Correlated 37°C
Amylase Total	U/l	86	73	99	6.50	13.00	Siemens - maltopenta/hexaoside 37°C
	U/l	86	73	99	6.50	13.00	Siemens 2-chloro-pNPG3 37°C
AST (GOT)	U/l	49	39	59	5.00	10.00	Tris buffer with P5P 37°C
	U/l	49	39	59	5.00	10.00	Siemens Dade Standard Non IFCC Correlated 37°C
Bicarbonate	mmol/l	15.0	11.9	18.1	1.55	3.10	Enzymatic
	mmol/l	14.3	11.4	17.2	1.45	2.90	Ion selective electrode
Bilirubin Direct	µmol/l	14.1	11.1	17.1	1.50	3.00	Diazo with Sulphanilic Acid
	mg/dl	0.825	0.649	1.00	0.09	0.18	
Bilirubin Total	µmol/l	29.0	22.9	35.1	3.05	6.10	Diazo with Sulphanilic Acid
	mg/dl	1.70	1.34	2.06	0.18	0.36	
Calcium	mmol/l	2.16	1.95	2.37	0.11	0.21	Cresolphthalein complexone
	mg/dl	8.66	7.82	9.50	0.42	0.84	
Chloride	mmol/l	96.5	88.7	104	3.90	7.80	ISE indirect
Cholesterol	mmol/l	3.45	3.00	3.90	0.23	0.45	Cholesterol Oxidase
	mg/dl	133	116	150	8.50	17.00	

SIEMENS DIMENSION RxL/Max/Xpand®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Cholesterol	mmol/l	3.35	2.92	3.78	0.22	0.43	Dimension-Siemens reagents
	mg/dl	129	113	145	8.00	16.00	
CK Total	U/l	200	164	236	18.00	36.00	CK-NAC (IFCC) 37°C
	U/l	212	174	250	19.00	38.00	Dithioerythritol 37°C
	U/l	202	166	238	18.00	36.00	Dithioerythritol (DTE) IFCC correlated 37°C
Creatinine	µmol/l	134	107	161	13.50	27.00	Alkaline picrate no deproteinization
	mg/dl	1.51	1.21	1.81	0.15	0.30	
	µmol/l	129	103	155	13.00	26.00	Creatinine PAP method
	mg/dl	1.46	1.16	1.76	0.15	0.30	
	µmol/l	134	107	161	13.50	27.00	Jaffe rate blanked
	mg/dl	1.51	1.21	1.81	0.15	0.30	
	µmol/l	135	108	162	13.50	27.00	Jaffe rate blanked compensated (-18 µmol/l)
	mg/dl	1.53	1.22	1.84	0.16	0.31	
gamma-GT	U/l	62	52	72	5.00	10.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	70	59	81	5.50	11.00	Siemens Dimension (non IFCC) 37°C
Glucose	mmol/l	6.31	5.36	7.26	0.48	0.95	Hexokinase
	mg/dl	114	96.6	131	8.70	17.40	
	mmol/l	6.21	5.28	7.14	0.47	0.93	Glucose oxidase
	mg/dl	112	95.1	129	8.45	16.90	
HDL - Cholesterol	mmol/l	1.05	0.89	1.21	0.08	0.16	Direct HDL PPD
	mg/dl	40.5	34.4	46.6	3.05	6.10	
	mmol/l	1.02	0.87	1.17	0.08	0.15	Direct HDL PEGME
	mg/dl	39.4	33.5	45.3	2.95	5.90	
	mmol/l	1.09	0.93	1.26	0.08	0.17	Direct Clearance Method
	mg/dl	42.1	35.7	48.5	3.20	6.40	

SIEMENS DIMENSION RxL/Max/Xpand®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
Iron	μmol/l	18.6	15.3	21.9	1.65	3.30	Colorimetric with ppt.
	μg/dl	104	85.5	123	9.25	18.50	
	μmol/l	18.7	15.3	22.1	1.70	3.40	Colorimetric without ppt.
	μg/dl	105	85.5	125	9.75	19.50	
Lactate	mmol/l	1.38	1.13	1.63	0.13	0.25	UV LDH
	mg/dl	12.4	10.2	14.6	1.10	2.20	
LD (LDH)	U/l	233	198	268	17.50	35.00	Siemens Dimension L-P Non IFCC 37°C
	U/l	235	200	270	17.50	35.00	L->P IFCC 37°C
Lipase	U/l	155	124	186	15.50	31.00	Colorimetric Siemens Dimension (LIPL Kit) 37°C
Lithium	mmol/l	0.96	0.85	1.08	0.06	0.12	Spectrophotometric
	mg/dl	0.667	0.587	0.747	0.04	0.08	
Magnesium	mmol/l	0.86	0.76	0.97	0.05	0.10	Methylthymol blue
	mg/dl	2.10	1.85	2.35	0.13	0.25	
Phosphate Inorganic	mmol/l	1.36	1.15	1.57	0.11	0.21	Phosphomolybdate enzymatic
	mg/dl	4.22	3.57	4.87	0.33	0.65	
	mmol/l	1.36	1.16	1.56	0.10	0.20	Phosphomolybdate UV
	mg/dl	4.22	3.60	4.84	0.31	0.62	
Potassium	mmol/l	3.94	3.62	4.26	0.16	0.32	ISE method - indirect
Protein Total	g/l	61.3	49.0	73.6	6.15	12.30	Biuret reaction end point
	g/dl	6.13	4.90	7.36	0.62	1.23	
Sodium	mmol/l	142	135	149	3.50	7.00	ISE method - indirect
TIBC	μmol/l	42.3	33.4	51.2	4.45	8.90	Removal of excess free iron
	μg/dl	236	187	285	24.50	49.00	
	μmol/l	39.0	30.8	47.2	4.10	8.20	FE+UIBC(saturation with iron)
	μg/dl	218	172	264	23.00	46.00	

SIEMENS DIMENSION RxL/Max/Xpand®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
TIBC	μmol/l	41.5	32.7	50.3	4.40	8.80	Direct Colorimetric
	μg/dl	232	183	281	24.50	49.00	
Triglycerides	mmol/l	1.08	0.91	1.25	0.09	0.17	Lipase/GPO-PAP no correction
	mg/dl	95.6	80.3	111	7.65	15.30	
	mmol/l	1.06	0.89	1.23	0.09	0.17	L/G Kinase EP. no correction
	mg/dl	93.8	78.8	109	7.50	15.00	
	mmol/l	1.10	0.92	1.28	0.09	0.18	Lipase/Glycerol Dehydrogenase
	mg/dl	97.4	81.4	113	8.00	16.00	
Urea	mmol/l	7.46	6.34	8.58	0.56	1.12	Urease end point
	mg/dl	44.8	38.1	51.5	3.35	6.70	
	mmol/l	7.42	6.31	8.53	0.56	1.11	Urease kinetic
	mg/dl	44.6	37.9	51.3	3.35	6.70	
	mmol/l	7.42	6.31	8.53	0.56	1.11	BUN
	mg/dl	20.8	17.7	23.9	1.55	3.10	
Uric Acid (Urate)	mmol/l	0.34	0.30	0.38	0.02	0.04	Uricase catalase 340nm
	mg/dl	5.70	4.96	6.44	0.37	0.74	
	mmol/l	0.34	0.29	0.38	0.02	0.04	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.68	4.94	6.42	0.37	0.74	
	mmol/l	0.34	0.30	0.39	0.02	0.05	Spectrophotometric at 280-290
	mg/dl	5.71	4.96	6.46	0.38	0.75	
	mmol/l	0.35	0.30	0.39	0.02	0.05	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.83	5.07	6.59	0.38	0.76	

Siemens/Dade Dimension Vista

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Albumin	g/l	43.9	37.3	50.5	3.30	6.60	Bromocresol Purple
	g/dl	4.39	3.73	5.05	0.33	0.66	
Alkaline Phosphatase	U/l	163	139	187	12.00	24.00	Siemens Dimension AMP buffer 37°C
ALT (GPT)	U/l	42	33	51	4.50	9.00	Tris buffer with P5P 37°C
	U/l	44	35	53	4.50	9.00	Siemens Dade Standard Non IFCC Correlated 37°C
Amylase Total	U/l	86	73	99	6.50	13.00	Siemens 2-chloro-pNPG3 37°C
AST (GOT)	U/l	49	39	59	5.00	10.00	Tris buffer with P5P 37°C
	U/l	49	39	59	5.00	10.00	Siemens Dade Standard Non IFCC Correlated 37°C
Bicarbonate	mmol/l	14.0	11.1	16.9	1.45	2.90	Enzymatic
Bilirubin Direct	µmol/l	14.1	11.1	17.1	1.50	3.00	Diazo with Sulphanilic Acid
	mg/dl	0.825	0.649	1.00	0.09	0.18	
Bilirubin Total	µmol/l	28.5	22.5	34.5	3.00	6.00	Diazo with Sulphanilic Acid
	mg/dl	1.67	1.32	2.02	0.18	0.35	
Calcium	mmol/l	2.14	1.93	2.35	0.11	0.21	Cresolphthalein complexone
	mg/dl	8.58	7.74	9.42	0.42	0.84	
Chloride	mmol/l	98.6	90.8	106	3.90	7.80	ISE indirect
Cholesterol	mmol/l	3.38	2.94	3.82	0.22	0.44	Cholesterol Oxidase
	mg/dl	130	113	147	8.50	17.00	
	mmol/l	3.43	2.99	3.87	0.22	0.44	Dimension-Siemens reagents
	mg/dl	132	115	149	8.50	17.00	
CK Total	U/l	203	167	239	18.00	36.00	CK-NAC (IFCC) 37°C

Siemens/Dade Dimension Vista

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

		Range					
Analyte	unit	target	low	high	1SD	2SD	methods
CK Total	U/l	195	160	230	17.50	35.00	Dithioerythritol 37°C
	U/l	196	161	231	17.50	35.00	Dithioerythritol (DTE) IFCC correlated 37°C
Creatinine	μmol/l	128	102	154	13.00	26.00	Alkaline picrate no deproteinization
	mg/dl	1.45	1.15	1.75	0.15	0.30	
	μmol/l	122	97.6	146	12.20	24.40	Randox Enzymatic UV method
	mg/dl	1.38	1.10	1.66	0.14	0.28	
	μmol/l	126	101	151	12.50	25.00	IDMS traceable
	mg/dl	1.42	1.14	1.70	0.14	0.28	
gamma-GT	U/l	66	56	76	5.00	10.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	67	57	77	5.00	10.00	Siemens Dimension (non IFCC) 37°C
Glucose	mmol/l	6.13	5.21	7.05	0.46	0.92	Hexokinase
	mg/dl	110	93.9	126	8.05	16.10	
HDL - Cholesterol	mmol/l	0.99	0.85	1.14	0.07	0.15	Direct HDL PEGME
	mg/dl	38.4	32.6	44.2	2.90	5.80	
Iron	μmol/l	19.1	15.7	22.5	1.70	3.40	Colorimetric without ppt.
	μg/dl	107	87.8	126	9.60	19.20	
Lactate	mmol/l	1.42	1.16	1.68	0.13	0.26	Colorimetric Lactate Oxidase
	mg/dl	12.8	10.5	15.1	1.15	2.30	
	mmol/l	1.46	1.20	1.72	0.13	0.26	UV LDH
	mg/dl	13.2	10.8	15.6	1.20	2.40	
LD (LDH)	U/l	243	207	279	18.00	36.00	Siemens Dimension L-P Non IFCC 37°C
	U/l	241	205	277	18.00	36.00	L->P IFCC 37°C
Lipase	U/l	173	138	208	17.50	35.00	Siemens Dimension Colorimetric (LIP Kit) 37°C
	U/l	162	130	194	16.00	32.00	Colorimetric Siemens Dimension (LIPL Kit) 37°C
Lithium	mmol/l	0.95	0.83	1.06	0.06	0.11	Spectrophotometric
	mg/dl	0.656	0.578	0.734	0.04	0.08	

Siemens/Dade Dimension Vista

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Magnesium	mmol/l	0.86	0.76	0.96	0.05	0.10	Methylthymol blue
	mg/dl	2.09	1.84	2.34	0.13	0.25	
Phosphate Inorganic	mmol/l	1.30	1.11	1.49	0.10	0.19	Phosphomolybdate UV
	mg/dl	4.03	3.44	4.62	0.30	0.59	
Potassium	mmol/l	3.93	3.61	4.25	0.16	0.32	ISE method - indirect
Protein Total	g/l	61.3	49.1	73.5	6.10	12.20	Biuret reaction end point
	g/dl	6.13	4.91	7.35	0.61	1.22	
Sodium	mmol/l	141	134	148	3.50	7.00	ISE method - indirect
TIBC	μmol/l	43.3	34.2	52.4	4.55	9.10	Removal of excess free iron
	μg/dl	242	191	293	25.50	51.00	
Triglycerides	mmol/l	1.16	0.97	1.35	0.09	0.19	Lipase/GPO-PAP no correction
	mg/dl	103	86.1	120	8.45	16.90	
	mmol/l	1.07	0.90	1.24	0.09	0.17	L/G Kinase EP. no correction
	mg/dl	94.7	79.3	110	7.70	15.40	
Urea	mmol/l	7.36	6.25	8.47	0.56	1.11	Urease kinetic
	mg/dl	44.2	37.6	50.8	3.30	6.60	
	mmol/l	7.36	6.26	8.46	0.55	1.10	BUN
	mg/dl	20.7	17.6	23.8	1.55	3.10	
Uric Acid (Urate)	mmol/l	0.32	0.28	0.37	0.02	0.04	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.44	4.74	6.14	0.35	0.70	
	mmol/l	0.32	0.28	0.36	0.02	0.04	Spectrophotometric at 280-290
	mg/dl	5.41	4.72	6.10	0.35	0.69	

VITALAB SELECTRA®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Albumin	g/l	42.9	36.5	49.3	3.20	6.40	Bromocresol Green
	g/dl	4.29	3.65	4.93	0.32	0.64	
Alkaline Phosphatase	U/l	281	239	323	21.00	42.00	Diethanolamine buffer DEA 37°C
ALT (GPT)	U/l	40	32	48	4.00	8.00	Tris buffer without P5P 37°C
AST (GOT)	U/l	40	32	48	4.00	8.00	Tris buffer without P5P 37°C
Bilirubin Direct	µmol/l	16.0	12.6	19.4	1.70	3.40	Diazo with Sulphanilic Acid
	mg/dl	0.936	0.737	1.14	0.10	0.20	
Bilirubin Total	µmol/l	28.8	22.8	34.8	3.00	6.00	Diazo with Sulphanilic Acid
	mg/dl	1.68	1.33	2.03	0.18	0.35	
	µmol/l	27.8	22.0	33.6	2.90	5.80	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.63	1.29	1.97	0.17	0.34	
Calcium	mmol/l	2.36	2.13	2.59	0.12	0.23	Arsenazo III
	mg/dl	9.46	8.54	10.4	0.46	0.92	
Cholesterol	mmol/l	4.09	3.56	4.62	0.27	0.53	Cholesterol Oxidase
	mg/dl	158	137	179	10.50	21.00	
CK Total	U/l	208	171	245	18.50	37.00	CK-NAC (IFCC) 37°C
Creatinine	µmol/l	123	98.4	148	12.30	24.60	Alkaline picrate no deproteinization
	mg/dl	1.39	1.11	1.67	0.14	0.28	
	µmol/l	128	102	154	13.00	26.00	Jaffe rate blanked
	mg/dl	1.45	1.15	1.75	0.15	0.30	
gamma-GT	U/l	56	47	65	4.50	9.00	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C

VITALAB SELECTRA®

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Glucose	mmol/l	6.42	5.46	7.38	0.48	0.96	Glucose oxidase
	mg/dl	116	98.4	134	8.80	17.60	
Iron	µmol/l	22.7	18.6	26.8	2.05	4.10	Colorimetric without ppt.
	µg/dl	127	104	150	11.50	23.00	
LD (LDH)	U/l	243	207	279	18.00	36.00	L->P IFCC 37°C
Phosphate Inorganic	mmol/l	1.45	1.23	1.67	0.11	0.22	Phosphomolybdate UV
	mg/dl	4.50	3.81	5.19	0.35	0.69	
Protein Total	g/l	64.8	51.8	77.8	6.50	13.00	Biuret reaction end point
	g/dl	6.48	5.18	7.78	0.65	1.30	
Triglycerides	mmol/l	1.12	0.94	1.30	0.09	0.18	Lipase/GPO-PAP no correction
	mg/dl	99.1	82.9	115	8.10	16.20	
Urea	mmol/l	7.26	6.17	8.35	0.55	1.09	Urease kinetic
	mg/dl	43.6	37.1	50.1	3.25	6.50	
	mmol/l	7.26	6.17	8.35	0.55	1.09	BUN
	mg/dl	20.4	17.3	23.5	1.55	3.10	
Uric Acid (Urate)	mmol/l	0.36	0.32	0.41	0.02	0.05	Uricase peroxidase no ascorbate oxidase
	mg/dl	6.10	5.29	6.91	0.41	0.81	
	mmol/l	0.35	0.31	0.40	0.02	0.05	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.95	5.17	6.73	0.39	0.78	

Weiner Lab BT 3000 Plus/CB 350i

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Albumin	g/l	39.8	33.8	45.8	3.00	6.00	Bromocresol Green
	g/dl	3.98	3.38	4.58	0.30	0.60	
Bilirubin Direct	μmol/l	18.5	14.6	22.4	1.95	3.90	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.08	0.854	1.31	0.11	0.23	
Bilirubin Total	μmol/l	25.0	19.7	30.3	2.65	5.30	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.46	1.15	1.77	0.16	0.31	
Calcium	mmol/l	2.20	1.98	2.42	0.11	0.22	Arsenazo III
	mg/dl	8.82	7.94	9.70	0.44	0.88	
Cholesterol	mmol/l	3.88	3.38	4.38	0.25	0.50	Cholesterol Oxidase
	mg/dl	150	130	170	10.00	20.00	
CK Total	U/l	207	170	244	18.50	37.00	CK-NAC (IFCC) 37°C
	U/l	130	106	154	12.00	24.00	CK-NAC (IFCC) 30°C
	U/l	88	72	104	8.00	16.00	CK-NAC (IFCC) 25°C
Creatinine	μmol/l	119	95.2	143	11.90	23.80	Alkaline picrate no deproteinization
	mg/dl	1.34	1.08	1.60	0.13	0.26	
Glucose	mmol/l	6.37	5.41	7.33	0.48	0.96	Glucose oxidase
	mg/dl	115	97.5	133	8.75	17.50	
LD (LDH)	U/l	385	327	443	29.00	58.00	P->L SFBC 37°C
	U/l	278	236	320	21.00	42.00	P->L SFBC 30°C
	U/l	195	166	224	14.50	29.00	P->L SFBC 25°C
Phosphate Inorganic	mmol/l	1.52	1.29	1.75	0.12	0.23	Phosphomolybdate UV
	mg/dl	4.71	4.00	5.42	0.36	0.71	

Weiner Lab BT 3000 Plus/CB 350i

ASSAYED HUMAN SERA LEVEL 2 (HUM ASY CONTROL 2)

Lot No. 823UN Cat. No. HN1530 / HS2611

Size: 20 x 5ml / 5 x 5ml Expiry: 2017-01

Analyte	unit	target	Range		1SD	2SD	methods
			low	high			
Protein Total	g/l	61.2	49.0	73.4	6.10	12.20	Biuret reaction end point
	g/dl	6.12	4.90	7.34	0.61	1.22	
Triglycerides	mmol/l	1.10	0.92	1.28	0.09	0.18	Lipase/GPO-PAP no correction
	mg/dl	97.4	81.5	113	7.95	15.90	
Urea	mmol/l	7.21	6.13	8.29	0.54	1.08	Urease kinetic
	mg/dl	43.3	36.8	49.8	3.25	6.50	
	mmol/l	7.21	6.13	8.29	0.54	1.08	BUN
	mg/dl	20.2	17.2	23.2	1.50	3.00	
Uric Acid (Urate)	mmol/l	0.34	0.29	0.38	0.02	0.04	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.68	4.94	6.42	0.37	0.74	