

CALIBRATION SERUM LEVEL 2 (CAL 2)

CAT. NO. CAL 2350 **GTIN:** 05055273200959 **SIZE:** 20 x 5ml
LOT NO. 1590UN **EXPIRY:** 2025-07-28

INTENDED USE

For use as a Calibrator in clinical chemistry assays. RANDOX Calibration Sera are based on lyophilised human serum. The concentrations and activities are suitable for calibration of clinical chemistry assays on a wide range of automatic analysers. Constituent concentrations are available at 2 levels.

SAFETY PRECAUTIONS AND WARNINGS

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. For *in vitro* diagnostic use only.

STORAGE AND STABILITY

Unreconstituted serum is stable up to the expiry date shown on the side of each individual bottle. Once reconstituted, the components of the Calibration Sera are stable for 8 hours at +15°C to +25°C, 7 days at +2°C to +8°C, and 28 days at -20°C when frozen once (see Limitations).

PREPARATION FOR USE

Serum must only be reconstituted using the following procedure:

1. Open the vial carefully, avoiding any loss of material.
2. Reconstitute by pipetting exactly 5ml of distilled water at +15°C to +25°C, into the vial.
3. Replace the rubber stopper and leave to stand for 30 minutes out of bright light before use.
4. Swirl gently several times during the reconstitution period to ensure that the contents are completely dissolved.
5. Prior to use, mix the contents by inverting the vial. Do not shake the vial, as the formation of foam should be avoided.
Ensure that no lyophilised material remains unreconstituted.
6. The serum is then ready for use with either a manual test or with an automated instrument.

MATERIALS PROVIDED

Calibration Serum - Level 2
Cat No. CAL 2350 20 x 5ml

MATERIALS REQUIRED BUT NOT PROVIDED

Calibrated pipette, double deionised water.

LIMITATIONS

After reconstitution, Bicarbonate is stable for 8 hours in the closed bottle and 1 hour in the open bottle. For Total and Prostatic Acid Phosphatase, the material should be stabilised by adding 1 drop (25µl - 30µl) of 0.7M Acetic acid solution to 1ml of the serum exactly 30 minutes after reconstitution. After stabilisation, Total & Prostatic Acid Phosphatase are 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 is stable for 2 days at 2 - 8°C and levels in the reconstituted serum will rise over the stability period. It is recommended that the reconstituted serum is 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 is stored in the dark. Stored in the dark, it is stable for 1 day at +2°C to +8°C. Do not store at +15°C to +25°C. Do not freeze. GLDH is stable for 1 day at 2 - 8°C. Bacterial contamination of the reconstituted serum will cause reductions in the stability of many components. Different lot numbers of this calibrator should not be interchanged, as the values assigned to the calibrators vary from lot to lot. Due to the zinc content in some batches of rubber stoppers, the QC material should be aliquoted into suitable containers without rubber stoppers and stored at +2°C to +8°C to ensure stable zinc levels throughout the stability period.

VALUE ASSIGNMENT

Each batch of serum is distributed to approximately 3000 laboratories worldwide and values are assigned by a consensus of results obtained by these laboratories. The Calibration values for each instrument have been determined in at least 10 independent laboratories. Values are verified against a master lot of calibrator, which is traceable to reference methods or reference materials. In some cases, values may be assigned at Randox Laboratories in comparison to a master lot of calibrator, which is traceable to reference methods or reference materials.

If an instrument specific value is not available, refer to the Method section. If necessary, contact Randox Laboratories - Technical Services, Northern Ireland, tel: +44 (0) 28 9445 1070 or email Technical.Services@randox.com.

NOTES

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

EC	REP
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CALIBRATION SERUM LEVEL 2 (CAL 2)

METHOD Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
a-HBDH	U/l	221	Oxobutyrate < 10 mmol/l 37°C
	U/l	167	Oxobutyrate < 10 mmol/l 30°C
	U/l	125	Oxobutyrate < 10 mmol/l 25°C
Albumin	g/l	41.7	Bromocresol Green
	g/dl	4.17	
	g/l	42.0	Bromocresol Purple
	g/dl	4.20	
	g/l	40.1	Turbidimetric Assays
	g/dl	4.01	
Alkaline Phosphatase	U/l	294	Diethanolamine buffer DEA 37°C
	U/l	229	Diethanolamine buffer DEA 30°C
	U/l	188	Diethanolamine buffer DEA 25°C
	U/l	193	AMP optimised to IFCC 37°C
	U/l	150	AMP optimised to IFCC 30°C
	U/l	123	AMP optimised to IFCC 25°C
	U/l	178	AMP non-optimised 37°C
	U/l	139	AMP non-optimised 30°C
ALT (GPT)	U/l	114	AMP non-optimised 25°C
	U/l	40	Colorimetric 37°C
	U/l	30	Colorimetric 30°C
	U/l	23	Colorimetric 25°C
	U/l	43	Tris buffer with P5P 37°C
	U/l	32	Tris buffer with P5P 30°C
	U/l	24	Tris buffer with P5P 25°C
	U/l	39	Tris buffer without P5P 37°C
	U/l	29	Tris buffer without P5P 30°C
	U/l	22	Tris buffer without P5P 25°C
	U/l	45	Tris buffer with P5P NVKC 37°C
	U/l	33	Tris buffer with P5P NVKC 30°C
Amylase Pancreatic	U/l	25	Tris buffer with P5P NVKC 25°C
	U/l	65	Immunoinhibition EPS substrate 37°C
	U/l	64	Roche EPS Liquid 37°C
Amylase Total	U/l	80	Randox Liquid Ethylidene pNPG7 37°C
	U/l	94	pNP Maltotrioxide substrates 37°C
	U/l	97	Siemens - blocked pNPG7 37°C
	U/l	75	Randox Lyo. Ethylidene pNPG7 37°C
	U/l	96	Randox Liquid Ethylidene pNPG7 37°C
	U/l	84	Beckman Synchron CX4/CX5/CX7 37°C
	U/l	90	Roche Integra 2-chloro-pNPG7 37°C

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METHOD Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Amylase Total	U/l	90	Other Roche 2-chloro-pNPG7 37°C
	U/l	89	Roche liquid stable pNPG7 37°C
	U/l	94	Siemens 2-chloro-pNPG3 37°C
	U/l	93	Beckman Coulter - blocked pNPG7 37°C
	U/l	93	Abbott Architect / Alinity cal factor 3431 37°C
	U/l	81	Beckman CNPG3 (Extinction Coeff) 37°C
	U/l	91	Abbott Alinity Amylase 2 37°C
	U/l	93	Abbott Architect 37°C
AST (GOT)	U/l	40	Colorimetric 37°C
	U/l	27	Colorimetric 30°C
	U/l	19	Colorimetric 25°C
	U/l	59	Tris buffer with P5P 37°C
	U/l	40	Tris buffer with P5P 30°C
	U/l	28	Tris buffer with P5P 25°C
	U/l	40	Tris buffer without P5P 37°C
	U/l	27	Tris buffer without P5P 30°C
	U/l	19	Tris buffer without P5P 25°C
	U/l	55	Tris buffer with P5P NVKC 37°C
	U/l	37	Tris buffer with P5P NVKC 30°C
	U/l	26	Tris buffer with P5P NVKC 25°C
Bicarbonate	mmol/l	11.9	Colorimetric
	mmol/l	12.2	Differential rate pH change
	mmol/l	12.2	Enzymatic
	mmol/l	12.8	Ion selective electrode
Bile Acids	µmol/l	23.8	4th Generation Colorimetric
	µmol/l	25.2	5th Generation Colorimetric
Bilirubin Direct	µmol/l	18.9	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.11	
	µmol/l	18.4	Diazo with Sulphanilic Acid
	mg/dl	1.07	
	µmol/l	19.0	Diazo with Dichloroaniline (DCA)
	mg/dl	1.11	
	µmol/l	15.9	Oxidation to Biliverdin/Vanadate
	mg/dl	0.932	
Bilirubin Total	µmol/l	17.7	Modified Jendrassik
	mg/dl	1.04	
	µmol/l	25.7	Diazo with Dichloroaniline (DCA)
	mg/dl	1.50	
	µmol/l	26.6	Diazo with Sulphanilic Acid
	mg/dl	1.55	
	µmol/l	24.2	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.41	
	µmol/l	24.7	Diazonium ion
	mg/dl	1.44	

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Analyte	unit	Target	methods
Bilirubin Total	μmol/l	29.1	Oxidation to Biliverdin/Vanadate
	mg/dl	1.70	
	μmol/l	35.4	Modified Jendrassik
	mg/dl	2.07	
Calcium	mmol/l	2.08	Cresolphthalein complexone
	mg/dl	8.34	
	mmol/l	2.03	Ion selective electrode
	mg/dl	8.14	
	mmol/l	2.11	Arsenazo III
	mg/dl	8.46	
Chloride	mmol/l	2.09	NM-BAPTA
	mg/dl	8.38	
	mmol/l	101	Colorimetric
	mmol/l	94.2	
	mmol/l	95.9	ISE indirect
	mmol/l	95.9	
Cholesterol	mmol/l	4.14	Cholesterol Oxidase - Abell Kendall
	mg/dl	160	
	mmol/l	4.19	Cholesterol Oxidase - IDMS
	mg/dl	162	
	mmol/l	4.07	Cholesterol Dehydrogenase
	mg/dl	157	
Cholinesterase	U/l	6114	Colorimetric Butyrylthiocholine 37°C
CK Total	U/l	205	CK-NAC serum start (DGKC) 37°C
	U/l	128	CK-NAC serum start (DGKC) 30°C
	U/l	87	CK-NAC serum start (DGKC) 25°C
	U/l	215	CK-NAC substrate start (DGKC) 37°C
	U/l	135	CK-NAC substrate start (DGKC) 30°C
	U/l	91	CK-NAC substrate start (DGKC) 25°C
	U/l	204	CK-NAC (IFCC) 37°C
	U/l	128	CK-NAC (IFCC) 30°C
	U/l	87	CK-NAC (IFCC) 25°C
Copper	μmol/l	15.9	Atomic absorption
	μg/dl	101	
	μmol/l	15.6	Colorimetric
	μg/dl	99.2	
Creatinine	μmol/l	127	Alkaline picrate with deproteinization
	mg/dl	1.43	
	μmol/l	130	Alkaline picrate no deproteinization
	mg/dl	1.47	
	μmol/l	133	Enzymatic UV method
	mg/dl	1.50	
	μmol/l	131	Creatinine PAP method
	mg/dl	1.48	

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METHOD Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Creatinine	μmol/l	131	Jaffe rate blanked
	mg/dl	1.48	
	μmol/l	157	Jaffe rate blanked comp. (-26 μmol/l)
	mg/dl	1.77	
	μmol/l	145	Jaffe rate blanked compensated (-18 μmol/l)
	mg/dl	1.64	
	μmol/l	127	IDMS traceable
	mg/dl	1.43	
gamma-GT	U/l	49	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	39	Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	30	Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C
	U/l	49	Gamma glutamyl-4-nitroanilide 37°C
	U/l	39	Gamma glutamyl-4-nitroanilide 30°C
	U/l	30	Gamma glutamyl-4-nitroanilide 25°C
	U/l	49	DCL gamma glutamyl-3-carboxy-4-nitroanilide 37°C
	U/l	39	DCL gamma glutamyl-3-carboxy-4-nitroanilide 30°C
	U/l	30	DCL gamma glutamyl-3-carboxy-4-nitroanilide 25°C
	U/l	51	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	40	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	31	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
GLDH	U/l	17	Triethanolamine buffer 50 mmol 37°C
	U/l	13	Triethanolamine buffer 50 mmol 30°C
	U/l	11	Triethanolamine buffer 50 mmol 25°C
Glucose	mmol/l	6.22	Glucose dehydrogenase
	mg/dl	112	
	mmol/l	6.30	Hexokinase
	mg/dl	114	
	mmol/l	6.46	Glucose oxidase
	mg/dl	116	
Iron	μmol/l	19.9	Colorimetric with ppt.
	μg/dl	111	
	μmol/l	19.8	Colorimetric without ppt.
	μg/dl	111	
Lactate	mmol/l	1.71	Ion selective electrode
	mg/dl	15.4	
	mmol/l	1.51	Colorimetric Lactate Oxidase
	mg/dl	13.6	
LD (LDH)	U/l	213	L->P 37°C
	U/l	154	L->P 30°C
	U/l	108	L->P 25°C
	U/l	464	P->L Scandinavian & Dutch 37°C
	U/l	335	P->L Scandinavian & Dutch 30°C
	U/l	235	P->L Scandinavian & Dutch 25°C

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Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
LD (LDH)	U/l	443	P->L German methods 37°C
	U/l	320	P->L German methods 30°C
	U/l	225	P->L German methods 25°C
	U/l	429	P->L SFBC 37°C
	U/l	310	P->L SFBC 30°C
	U/l	218	P->L SFBC 25°C
	U/l	220	L->P IFCC 37°C
	U/l	159	L->P IFCC 30°C
	U/l	112	L->P IFCC 25°C
Lipase	U/l	32	Other Colorimetric 37°C
	U/l	33	Roche Colorimetric 37°C
	U/l	41	Randox Colorimetric 37°C
Lithium	mmol/l	0.956	Ion selective electrode
	mg/dl	0.664	
	mmol/l	0.963	Spectrophotometric
	mg/dl	0.669	
Magnesium	mmol/l	0.884	Arsenazo III
	mg/dl	2.15	
	mmol/l	1.00	Calmagite
	mg/dl	2.43	
	mmol/l	0.920	Xylidyl Blue
	mg/dl	2.24	
	mmol/l	0.900	Methylthymol blue
	mg/dl	2.19	
	mmol/l	0.930	Chlorphosphonazo III
	mg/dl	2.26	
Osmolality	mmol/l	0.892	Enzymatic
	mg/dl	2.17	
	mmol/l	0.892	Enzymatic
Phosphate Inorganic	mmol/kg	297	Calculated
	mOsm/kg	303	Freezing point depression
	mmol/l	1.51	Phosphomolybdate enzymatic
	mg/dl	4.68	
Potassium	mmol/l	1.50	Phosphomolybdate UV
	mg/dl	4.65	
	mmol/l	3.94	ISE method - direct
	mmol/l	3.98	ISE method - indirect
Protein Total	mmol/l	4.17	Enzymatic
	g/l	59.0	Biuret reaction end point
	g/dl	5.90	
	g/l	59.1	Biuret reaction kinetic
	g/dl	5.91	
Sodium	mmol/l	140	ISE method - direct

CALIBRATION SERUM LEVEL 2 (CAL 2)

METHOD Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Sodium	mmol/l	142	ISE method - indirect
	mmol/l	143	Enzymatic
TIBC	μmol/l	43.7	Removal of excess free iron
	μg/dl	244	
	μmol/l	43.9	FE+UIBC(saturation with iron)
	μg/dl	245	
	μmol/l	48.0	Direct Colorimetric
	μg/dl	268	
	μmol/l	47.6	Calculated from Transferrin
	μg/dl	266	
Triglycerides	μmol/l	51.8	Randox Direct
	μg/dl	290	
	mmol/l	1.11	Lipase/GPO-PAP no correction
	mg/dl	98.2	
	mmol/l	1.11	Lipase/GPO-PAP 0.11mmol/l correction
	mg/dl	98.2	
	mmol/l	1.10	L/G Kinase EP. no correction
	mg/dl	97.4	
Urea	mmol/l	1.09	L/G kinase EP. 0.11 mmol/l correction
	mg/dl	96.5	
	mmol/l	1.11	Lipase/Glycerol Dehydrogenase
	mg/dl	98.2	
	mmol/l	7.56	Urease end point
	mg/dl	45.4	
Uric Acid (Urate)	mmol/l	7.57	Urease kinetic
	mg/dl	45.5	
	mmol/l	7.57	BUN
	mg/dl	21.2	
Uric Acid (Urate)	mmol/l	0.339	Uricase catalase 340nm
	mg/dl	5.70	
	mmol/l	0.340	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.71	
	mmol/l	0.342	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.75	
Zinc	mmol/l	0.337	Spectrophotometric at 280-290
	mg/dl	5.66	
	mmol/l	0.338	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.68	
Zinc	μmol/l	22.2	Atomic absorption
	μg/dl	145	
	μmol/l	23.0	Colorimetric with deproteinisation
	μg/dl	150	

CALIBRATION SERUM LEVEL 2 (CAL 2)

Abbott Alinity/ Architect c/ci Systems® Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Albumin	g/l	41.6	Bromocresol Green
	g/dl	4.16	
	g/l	42.7	Bromocresol Purple
	g/dl	4.27	
Alkaline Phosphatase	U/l	182	AMP optimised to IFCC 37°C
	U/l	178	AMP non-optimised 37°C
ALT (GPT)	U/l	40	Tris buffer without P5P 37°C
Amylase Pancreatic	U/l	65	Immunoinhibition EPS substrate 37°C
Amylase Total	U/l	93	Abbott Architect / Alinity cal factor 3431 37°C
	U/l	107	Abbott Architect / Alinity cal factor 3806 37°C
	U/l	92	Abbott - blocked pNPG7 37°C
AST (GOT)	U/l	39	Tris buffer without P5P 37°C
Bilirubin Direct	µmol/l	18.5	Diazo with Sulphanilic Acid
	mg/dl	1.08	
	µmol/l	19.0	Diazo with Dichloroaniline (DCA)
	mg/dl	1.11	
Bilirubin Total	µmol/l	25.6	Diazo with Dichloroaniline (DCA)
	mg/dl	1.50	
	µmol/l	26.2	Diazo with Sulphanilic Acid
	mg/dl	1.53	
	µmol/l	25.7	Diazonium ion
	mg/dl	1.50	
Calcium	mmol/l	2.07	Arsenazo III
	mg/dl	8.30	
Chloride	mmol/l	96.8	ISE indirect
Cholesterol	mmol/l	4.11	Cholesterol Oxidase - Abell Kendall
	mg/dl	159	
	mmol/l	3.98	Cholesterol Oxidase - IDMS
	mg/dl	154	
Cholinesterase	U/l	6888	Colorimetric Butyrylthiocholine 37°C
CK Total	U/l	208	CK-NAC (IFCC) 37°C
	U/l	209	Abbott CK-NAC (IFCC) 37°C
Creatinine	µmol/l	132	Alkaline picrate no deproteinization
	mg/dl	1.50	
	µmol/l	131	Enzymatic UV method
	mg/dl	1.48	
gamma-GT	U/l	50	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	50	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
Glucose	mmol/l	6.21	Hexokinase
	mg/dl	112	

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Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Glucose	mmol/l	6.15	Glucose oxidase
	mg/dl	111	
Iron	µmol/l	21.1	Colorimetric with ppt.
	µg/dl	118	
	µmol/l	20.9	Colorimetric without ppt.
	µg/dl	117	
Lactate	mmol/l	1.60	Colorimetric Lactate Oxidase
	mg/dl	14.4	
LD (LDH)	U/l	210	L->P 37°C
	U/l	212	L->P IFCC 37°C
Lipase	U/l	33	Other Colorimetric 37°C
Lithium	mmol/l	0.934	Spectrophotometric
	mg/dl	0.649	
Magnesium	mmol/l	0.869	Arsenazo III
	mg/dl	2.11	
	mmol/l	0.884	Enzymatic
	mg/dl	2.15	
Phosphate Inorganic	mmol/l	1.47	Phosphomolybdate enzymatic
	mg/dl	4.56	
	mmol/l	1.49	Phosphomolybdate UV
	mg/dl	4.62	
Potassium	mmol/l	3.97	ISE method - indirect
Protein Total	g/l	60.4	Biuret reaction end point
	g/dl	6.04	
	g/l	61.3	Biuret reaction kinetic
	g/dl	6.13	
Sodium	mmol/l	142	ISE method - indirect
TIBC	µmol/l	43.9	FE+UIBC(saturation with iron)
	µg/dl	245	
	µmol/l	48.4	Calculated from Transferrin
	µg/dl	271	
Triglycerides	mmol/l	1.05	Lipase/GPO-PAP no correction
	mg/dl	92.9	
	mmol/l	1.02	L/G Kinase EP. no correction
	mg/dl	90.3	
	mmol/l	1.07	Lipase/Glycerol Dehydrogenase
	mg/dl	94.7	
Urea	mmol/l	7.73	Urease kinetic
	mg/dl	46.5	
	mmol/l	7.73	BUN
	mg/dl	21.7	
Uric Acid (Urate)	mmol/l	0.337	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.66	

CALIBRATION SERUM LEVEL 2 (CAL 2)

Abbott Alinity/ Architect c/ci Systems® Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Uric Acid (Urate)	mmol/l	0.341	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.73	

CALIBRATION SERUM LEVEL 2 (CAL 2)

Beckman Coulter AU Series® Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Albumin	g/l	40.2	Bromocresol Green
	g/dl	4.02	
Alkaline Phosphatase	U/l	211	AMP optimised to IFCC 37°C
ALT (GPT)	U/l	42	Beckman Mod. IFCC Ref. without P5P 37°C
	U/l	43	Beckman (Extinction Coefficient) 37°C
Amylase Total	U/l	93	Beckman Coulter - blocked pNPG7 37°C
	U/l	81	Beckman CNPG3 (Extinction Coeff) 37°C
AST (GOT)	U/l	42	Tris buffer without P5P 37°C
	U/l	44	Beckman Mod. IFCC Ref. without P5P 37°C
	U/l	43	Beckman (Extinction Coefficient) 37°C
Bile Acids	µmol/l	24.0	Enzymatic Colorimetric
Bilirubin Direct	µmol/l	18.8	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.10	
Bilirubin Total	µmol/l	28.2	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.65	
	µmol/l	28.8	DPD (Beckman AU)
	mg/dl	1.68	
Calcium	mmol/l	2.12	Cresolphthalein complexone
	mg/dl	8.50	
	mmol/l	2.13	Arsenazo III
	mg/dl	8.54	
Chloride	mmol/l	94.1	ISE indirect
Cholesterol	mmol/l	4.11	Cholesterol Oxidase - Abell Kendall
	mg/dl	159	
	mmol/l	4.29	Cholesterol Oxidase - IDMS
	mg/dl	166	
	mmol/l	4.23	Cholesterol Dehydrogenase
	mg/dl	163	
Cholinesterase	U/l	5520	Colorimetric Butyrylthiocholine 37°C
CK Total	U/l	215	CK-NAC (IFCC) 37°C
	U/l	209	Beckman CK-NAC (Extinction Coeff) 37°C
Creatinine	µmol/l	132	Alkaline picrate no deproteinization
	mg/dl	1.49	
	µmol/l	138	Enzymatic UV method
	mg/dl	1.56	
	µmol/l	132	Jaffe rate blanked
	mg/dl	1.49	
	µmol/l	141	Jaffe rate blanked compensated (-18 µmol/l)
	mg/dl	1.59	

CALIBRATION SERUM LEVEL 2 (CAL 2)

Beckman Coulter AU Series® Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Creatinine	μmol/l	126	IDMS traceable
	mg/dl	1.42	
gamma-GT	U/l	52	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	52	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	51	Beckman Szasz (Extinction Coeff) 37°C
GLDH	U/l	18	Triethanolamine buffer 50 mmol 37°C
Glucose	mmol/l	6.31	Hexokinase
	mg/dl	114	
	mmol/l	6.29	Glucose oxidase
	mg/dl	113	
Iron	μmol/l	20.4	Colorimetric with ppt.
	μg/dl	114	
	μmol/l	19.9	Colorimetric without ppt.
	μg/dl	111	
Lactate	mmol/l	1.46	Colorimetric Lactate Oxidase
	mg/dl	13.2	
LD (LDH)	U/l	212	L->P 37°C
	U/l	467	P->L Scandinavian & Dutch 37°C
	U/l	222	L->P IFCC 37°C
	U/l	201	L to P Beckman (Extinction Coeff) 37°C
Lipase	U/l	42	Randox Colorimetric 37°C
Lithium	mmol/l	0.983	Spectrophotometric
	mg/dl	0.683	
Magnesium	mmol/l	0.922	Xylidyl Blue
	mg/dl	2.24	
Phosphate Inorganic	mmol/l	1.51	Phosphomolybdate UV
	mg/dl	4.68	
Potassium	mmol/l	3.94	ISE method - indirect
Protein Total	g/l	59.0	Biuret reaction end point
	g/dl	5.90	
Sodium	mmol/l	142	ISE method - indirect
TIBC	μmol/l	46.8	FE+UIBC(saturation with iron)
	μg/dl	261	
	μmol/l	47.8	Direct Colorimetric
	μg/dl	267	
Triglycerides	mmol/l	1.11	Lipase/GPO-PAP no correction
	mg/dl	98.2	
	mmol/l	1.10	L/G Kinase EP. no correction
	mg/dl	97.4	
Urea	mmol/l	7.62	Urease end point
	mg/dl	45.8	
	mmol/l	7.75	Urease kinetic
	mg/dl	46.6	

CALIBRATION SERUM LEVEL 2 (CAL 2)

Beckman Coulter AU Series® Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Urea	mmol/l	7.75	BUN
	mg/dl	21.8	
Uric Acid (Urate)	mmol/l	0.343	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.76	
	mmol/l	0.344	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.78	
Zinc	µmol/l	21.3	Colorimetric without deprot.
	µg/dl	139	

CALIBRATION SERUM LEVEL 2 (CAL 2)

COBAS INTEGRA® Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Albumin	g/l	43.5	Bromocresol Green
	g/dl	4.35	
	g/l	39.3	Turbidimetric Assays
	g/dl	3.93	
Alkaline Phosphatase	U/l	177	Roche Integra AMP buffer 37°C
	U/l	138	Roche Integra AMP buffer 30°C
	U/l	113	Roche Integra AMP buffer 25°C
ALT (GPT)	U/l	36	Tris buffer without P5P 37°C
	U/l	27	Tris buffer without P5P 30°C
	U/l	20	Tris buffer without P5P 25°C
Amylase Total	U/l	90	Roche Integra 2-chloro-pNPG7 37°C
	U/l	90	Roche liquid stable pNPG7 37°C
AST (GOT)	U/l	38	Tris buffer without P5P 37°C
	U/l	26	Tris buffer without P5P 30°C
	U/l	18	Tris buffer without P5P 25°C
Bilirubin Direct	µmol/l	18.6	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.09	
	µmol/l	19.4	Diazo with Sulphanilic Acid
	mg/dl	1.13	
	µmol/l	18.5	Roche DPD JG standardised
	mg/dl	1.08	
Bilirubin Total	µmol/l	25.2	Diazo with Sulphanilic Acid
	mg/dl	1.47	
	µmol/l	25.2	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.47	
	µmol/l	25.1	Diazonium ion
	mg/dl	1.47	
Calcium	mmol/l	2.04	Cresolphthalein complexone
	mg/dl	8.18	
	mmol/l	2.07	NM-BAPTA
	mg/dl	8.30	
Chloride	mmol/l	95.0	ISE indirect
Cholesterol	mmol/l	4.12	Cholesterol Oxidase - Abell Kendall
	mg/dl	159	
	mmol/l	4.10	Cholesterol Oxidase - IDMS
	mg/dl	158	
CK Total	U/l	200	CK-NAC (IFCC) 37°C
	U/l	125	CK-NAC (IFCC) 30°C
	U/l	85	CK-NAC (IFCC) 25°C

CALIBRATION SERUM LEVEL 2 (CAL 2)

COBAS INTEGRA® Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Creatinine	μmol/l	125	Alkaline picrate with deproteinization
	mg/dl	1.41	
	μmol/l	127	Alkaline picrate no deproteinization
	mg/dl	1.44	
	μmol/l	135	Roche Creatinine Plus
	mg/dl	1.52	
	μmol/l	153	Jaffe rate blanked comp. (-26 μmol/l)
	mg/dl	1.73	
	μmol/l	145	Jaffe rate blanked compensated (-18 μmol/l)
	mg/dl	1.64	
gamma-GT	U/l	45	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	35	Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	28	Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C
	U/l	52	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	41	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	32	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
Glucose	mmol/l	6.45	Hexokinase
	mg/dl	116	
Iron	μmol/l	20.2	Colorimetric with ppt.
	μg/dl	113	
	μmol/l	19.9	Colorimetric without ppt.
	μg/dl	111	
Lactate	mmol/l	1.56	Colorimetric Lactate Oxidase
	mg/dl	14.1	
LD (LDH)	U/l	226	L->P IFCC 37°C
	U/l	163	L->P IFCC 30°C
	U/l	115	L->P IFCC 25°C
Lipase	U/l	33	Roche Colorimetric 37°C
Magnesium	mmol/l	0.927	Xylidyl Blue
	mg/dl	2.25	
	mmol/l	0.924	Chlorphosphonazo III
	mg/dl	2.25	
Phosphate Inorganic	mmol/l	1.57	Phosphomolybdate enzymatic
	mg/dl	4.87	
	mmol/l	1.56	Phosphomolybdate UV
	mg/dl	4.84	
Potassium	mmol/l	3.93	ISE method - indirect
Protein Total	g/l	56.7	Biuret reaction end point
	g/dl	5.67	
	g/l	57.3	Biuret reaction kinetic
	g/dl	5.73	
Sodium	mmol/l	141	ISE method - indirect
TIBC	μmol/l	43.8	FE+UIBC(saturation with iron)
	μg/dl	245	

CALIBRATION SERUM LEVEL 2 (CAL 2)

COBAS INTEGRA® Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Triglycerides	mmol/l	1.11	Lipase/GPO-PAP no correction
	mg/dl	98.2	
Urea	mmol/l	7.33	Urease kinetic
	mg/dl	44.1	
	mmol/l	7.33	BUN
	mg/dl	20.6	
Uric Acid (Urate)	mmol/l	0.345	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.80	
	mmol/l	0.346	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.81	
	mmol/l	0.349	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.86	

CALIBRATION SERUM LEVEL 2 (CAL 2)

Elitech/Vitalab Selectra Series Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Albumin	g/l	42.5	Bromocresol Green
	g/dl	4.25	
AST (GOT)	U/l	46	Tris buffer without P5P 37°C
Calcium	mmol/l	2.26	Arsenazo III
	mg/dl	9.06	
Cholesterol	mmol/l	4.19	Cholesterol Oxidase - Abell Kendall
	mg/dl	162	
Creatinine	μmol/l	123	Creatinine PAP method
	mg/dl	1.39	
Glucose	mmol/l	6.70	Glucose oxidase
	mg/dl	121	
Phosphate Inorganic	mmol/l	1.57	Phosphomolybdate UV
	mg/dl	4.87	
Protein Total	g/l	58.7	Biuret reaction end point
	g/dl	5.87	
Triglycerides	mmol/l	1.19	Lipase/GPO-PAP no correction
	mg/dl	105	
Urea	mmol/l	7.69	Urease kinetic
	mg/dl	46.2	
	mmol/l	7.69	BUN
	mg/dl	21.6	
Uric Acid (Urate)	mmol/l	0.358	Uricase peroxidase no ascorbate oxidase
	mg/dl	6.01	

CALIBRATION SERUM LEVEL 2 (CAL 2)

HITACHI SERIES® Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Chloride	mmol/l	92.3	ISE indirect
Cholesterol	mmol/l	3.98	Cholesterol Oxidase - Abell Kendall
	mg/dl	154	
Potassium	mmol/l	4.02	ISE method - indirect
Sodium	mmol/l	143	ISE method - indirect

CALIBRATION SERUM LEVEL 2 (CAL 2)

Konelab 20/30/60®/Thermo Scientific Indiko Plus® Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Albumin	g/l	39.4	Bromocresol Green
	g/dl	3.94	
Alkaline Phosphatase	U/l	205	AMP optimised to IFCC 37°C
	U/l	160	AMP optimised to IFCC 30°C
	U/l	131	AMP optimised to IFCC 25°C
ALT (GPT)	U/l	44	Tris buffer without P5P 37°C
	U/l	33	Tris buffer without P5P 30°C
	U/l	25	Tris buffer without P5P 25°C
AST (GOT)	U/l	45	Tris buffer without P5P 37°C
	U/l	30	Tris buffer without P5P 30°C
	U/l	21	Tris buffer without P5P 25°C
Bilirubin Total	µmol/l	23.2	Nitrobenzenediazonium salt
	mg/dl	1.36	
Calcium	mmol/l	2.05	Arsenazo III
	mg/dl	8.22	
Cholesterol	mmol/l	4.21	Cholesterol Oxidase - Abell Kendall
	mg/dl	163	
CK Total	U/l	211	CK-NAC (IFCC) 37°C
	U/l	132	CK-NAC (IFCC) 30°C
	U/l	90	CK-NAC (IFCC) 25°C
Creatinine	µmol/l	134	Alkaline picrate no deproteinization
	mg/dl	1.51	
gamma-GT	U/l	53	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	42	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	33	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
Glucose	mmol/l	6.13	Glucose oxidase
	mg/dl	110	
Iron	µmol/l	21.7	Colorimetric without ppt.
	µg/dl	121	
Magnesium	mmol/l	0.965	Xylidyl Blue
	mg/dl	2.34	
Phosphate Inorganic	mmol/l	1.53	Phosphomolybdate UV
	mg/dl	4.74	
Potassium	mmol/l	3.81	ISE method - direct
Protein Total	g/l	61.1	Biuret reaction end point
	g/dl	6.11	
Sodium	mmol/l	137	ISE method - direct
Triglycerides	mmol/l	1.17	Lipase/GPO-PAP no correction
	mg/dl	104	

CALIBRATION SERUM LEVEL 2 (CAL 2)

Konelab 20/30/60®/Thermo Scientific Indiko Plus® Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Urea	mmol/l	7.42	Urease kinetic
	mg/dl	44.6	
	mmol/l	7.42	BUN
	mg/dl	20.8	

CALIBRATION SERUM LEVEL 2 (CAL 2)

MINDRAY BS SERIES Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Albumin	g/l	41.6	Bromocresol Green
	g/dl	4.16	
Alkaline Phosphatase	U/l	194	AMP optimised to IFCC 37°C
	U/l	151	AMP optimised to IFCC 30°C
	U/l	124	AMP optimised to IFCC 25°C
ALT (GPT)	U/l	43	Tris buffer without P5P 37°C
	U/l	32	Tris buffer without P5P 30°C
	U/l	24	Tris buffer without P5P 25°C
Amylase Total	U/l	94	pNP Maltotrioxide substrates 37°C
AST (GOT)	U/l	43	Tris buffer without P5P 37°C
	U/l	29	Tris buffer without P5P 30°C
	U/l	20	Tris buffer without P5P 25°C
Bilirubin Total	µmol/l	26.3	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.54	
Calcium	mmol/l	2.18	Arsenazo III
	mg/dl	8.74	
Cholesterol	mmol/l	4.03	Cholesterol Oxidase - Abell Kendall
	mg/dl	156	
CK Total	U/l	203	CK-NAC (IFCC) 37°C
	U/l	127	CK-NAC (IFCC) 30°C
	U/l	86	CK-NAC (IFCC) 25°C
Creatinine	µmol/l	130	Alkaline picrate no deproteinization
	mg/dl	1.47	
gamma-GT	U/l	48	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	38	Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	30	Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C
Glucose	mmol/l	6.74	Glucose oxidase
	mg/dl	121	
LD (LDH)	U/l	444	P->L German methods 37°C
	U/l	321	P->L German methods 30°C
	U/l	225	P->L German methods 25°C
	U/l	226	L->P IFCC 37°C
	U/l	163	L->P IFCC 30°C
	U/l	115	L->P IFCC 25°C
Magnesium	mmol/l	0.932	Xylidyl Blue
	mg/dl	2.26	
Phosphate Inorganic	mmol/l	1.68	Phosphomolybdate UV
	mg/dl	5.21	
Protein Total	g/l	60.5	Biuret reaction end point
	g/dl	6.05	

CALIBRATION SERUM LEVEL 2 (CAL 2)

MINDRAY BS SERIES Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Triglycerides	mmol/l	1.14	Lipase/GPO-PAP no correction
	mg/dl	101	
Urea	mmol/l	7.68	Urease kinetic
	mg/dl	46.2	
	mmol/l	7.68	BUN
	mg/dl	21.6	
Uric Acid (Urate)	mmol/l	0.337	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.66	

CALIBRATION SERUM LEVEL 2 (CAL 2)

Roche Cobas C111® Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Albumin	g/l	43.4	Bromocresol Green
	g/dl	4.34	
Alkaline Phosphatase	U/l	175	Roche Integra AMP buffer 37°C
	U/l	136	Roche Integra AMP buffer 30°C
	U/l	112	Roche Integra AMP buffer 25°C
ALT (GPT)	U/l	37	Tris buffer without P5P 37°C
	U/l	27	Tris buffer without P5P 30°C
	U/l	21	Tris buffer without P5P 25°C
Amylase Total	U/l	90	Roche liquid stable pNPG7 37°C
AST (GOT)	U/l	40	Tris buffer without P5P 37°C
	U/l	27	Tris buffer without P5P 30°C
	U/l	19	Tris buffer without P5P 25°C
Bilirubin Direct	µmol/l	18.4	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.08	
	µmol/l	18.9	Roche DPD JG standardised
	mg/dl	1.11	
Bilirubin Total	µmol/l	25.8	Diazo with Sulphanilic Acid
	mg/dl	1.51	
	µmol/l	24.8	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.45	
	µmol/l	24.4	Diazonium ion
	mg/dl	1.43	
Calcium	mmol/l	2.10	NM-BAPTA
	mg/dl	8.42	
Cholesterol	mmol/l	4.14	Cholesterol Oxidase - Abell Kendall
	mg/dl	160	
	mmol/l	4.20	Cholesterol Oxidase - IDMS
	mg/dl	162	
CK Total	U/l	197	CK-NAC (IFCC) 37°C
	U/l	123	CK-NAC (IFCC) 30°C
	U/l	84	CK-NAC (IFCC) 25°C
Creatinine	µmol/l	133	Roche Creatinine Plus
	mg/dl	1.50	
gamma-GT	U/l	49	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	39	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	30	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
Glucose	mmol/l	6.48	Hexokinase
	mg/dl	117	
LD (LDH)	U/l	229	L->P IFCC 37°C
	U/l	165	L->P IFCC 30°C
	U/l	116	L->P IFCC 25°C

CALIBRATION SERUM LEVEL 2 (CAL 2)

Roche Cobas C111® Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Phosphate Inorganic	mmol/l	1.54	Phosphomolybdate UV
	mg/dl	4.77	
Triglycerides	mmol/l	1.13	Lipase/GPO-PAP no correction
	mg/dl	100	
Urea	mmol/l	7.31	Urease kinetic
	mg/dl	43.9	
	mmol/l	7.31	BUN
	mg/dl	20.5	
Uric Acid (Urate)	mmol/l	0.343	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.76	
	mmol/l	0.339	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.70	
	mmol/l	0.354	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.95	

CALIBRATION SERUM LEVEL 2 (CAL 2)

Roche Cobas c303/501/502/503 Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Albumin	g/l	42.6	Bromocresol Green
	g/dl	4.26	
	g/l	42.0	Turbidimetric Assays
	g/dl	4.20	
Alkaline Phosphatase	U/l	176	Roche Integra AMP buffer 37°C
	U/l	137	Roche Integra AMP buffer 30°C
	U/l	112	Roche Integra AMP buffer 25°C
ALT (GPT)	U/l	38	Tris buffer without P5P 37°C
	U/l	28	Tris buffer without P5P 30°C
	U/l	21	Tris buffer without P5P 25°C
Amylase Pancreatic	U/l	64	Roche EPS Liquid 37°C
Amylase Total	U/l	88	Roche Integra 2-chloro-pNPG7 37°C
	U/l	88	Roche liquid stable pNPG7 37°C
AST (GOT)	U/l	38	Tris buffer without P5P 37°C
	U/l	26	Tris buffer without P5P 30°C
	U/l	18	Tris buffer without P5P 25°C
Bicarbonate	mmol/l	12.4	Enzymatic
Bilirubin Direct	µmol/l	19.0	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.11	
	µmol/l	19.1	Diazo with Sulphanilic Acid
	mg/dl	1.12	
	µmol/l	19.4	Roche DPD JG standardised
Bilirubin Total	µmol/l	24.1	Diazo with Sulphanilic Acid
	mg/dl	1.41	
	µmol/l	23.9	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.40	
	µmol/l	24.0	Diazonium ion
Calcium	mmol/l	2.08	Cresolphthalein complexone
	mg/dl	8.34	
	mmol/l	2.09	NM-BAPTA
	mg/dl	8.38	
Chloride	mmol/l	91.6	ISE indirect
Cholesterol	mmol/l	4.17	Cholesterol Oxidase - Abell Kendall
	mg/dl	161	
	mmol/l	4.19	Cholesterol Oxidase - IDMS
	mg/dl	162	
Cholinesterase	U/l	5537	Colorimetric Butyrylthiocholine 37°C

CALIBRATION SERUM LEVEL 2 (CAL 2)

Roche Cobas c303/501/502/503 Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
CK Total	U/l	207	CK-NAC substrate start (DGKC) 37°C
	U/l	130	CK-NAC substrate start (DGKC) 30°C
	U/l	88	CK-NAC substrate start (DGKC) 25°C
	U/l	203	CK-NAC (IFCC) 37°C
	U/l	127	CK-NAC (IFCC) 30°C
	U/l	86	CK-NAC (IFCC) 25°C
Creatinine	µmol/l	133	Alkaline picrate no deproteinization
	mg/dl	1.50	
	µmol/l	135	Roche Creatinine Plus
	mg/dl	1.53	
	µmol/l	158	Jaffe rate blanked comp. (-26 µmol/l)
	mg/dl	1.79	
gamma-GT	µmol/l	150	Jaffe rate blanked compensated (-18 µmol/l)
	mg/dl	1.70	
	U/l	46	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	36	Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	28	Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C
	U/l	52	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
Glucose	U/l	41	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	32	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
	mmol/l	6.30	Hexokinase
	mg/dl	114	
	µmol/l	19.5	Colorimetric with ppt.
	µg/dl	109	
Iron	µmol/l	19.4	Colorimetric without ppt.
	µg/dl	108	
	mmol/l	1.54	Colorimetric Lactate Oxidase
	mg/dl	13.9	
	U/l	220	L->P IFCC 37°C
	U/l	159	L->P IFCC 30°C
Lactate	U/l	112	L->P IFCC 25°C
	U/l	33	Roche Colorimetric 37°C
	mmol/l	0.980	Spectrophotometric
	mg/dl	0.681	
	mmol/l	0.919	Xylidyl Blue
	mg/dl	2.23	
Lipase	mmol/l	0.928	Chlorphosphonazo III
	mg/dl	2.26	
	mmol/l	1.51	Phosphomolybdate enzymatic
	mg/dl	4.68	
	mmol/l	1.50	Phosphomolybdate UV
	mg/dl	4.65	
Lithium	mmol/l	4.01	ISE method - indirect
	mg/dl		
	mmol/l		
	mg/dl		
	mmol/l		
	mg/dl		
Magnesium	mmol/l		
	mg/dl		
	mmol/l		
	mg/dl		
	mmol/l		
	mg/dl		
Phosphate Inorganic	mmol/l		
	mg/dl		
	mmol/l		
	mg/dl		
	mmol/l		
	mg/dl		
Potassium	mmol/l		
	mg/dl		
	mmol/l		
	mg/dl		
	mmol/l		
	mg/dl		

CALIBRATION SERUM LEVEL 2 (CAL 2)

Roche Cobas c303/501/502/503 Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Protein Total	g/l	58.6	Biuret reaction end point
	g/dl	5.86	
Sodium	mmol/l	142	ISE method - indirect
TIBC	μmol/l	42.4	FE+UIBC(saturation with iron)
	μg/dl	237	
	μmol/l	49.6	Calculated from Transferrin
	μg/dl	277	
Triglycerides	mmol/l	1.12	Lipase/GPO-PAP no correction
	mg/dl	99.1	
	mmol/l	1.10	L/G Kinase EP. no correction
	mg/dl	97.4	
Urea	mmol/l	7.59	Urease kinetic
	mg/dl	45.6	
	mmol/l	7.59	BUN
	mg/dl	21.3	
Uric Acid (Urate)	mmol/l	0.333	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.59	
	mmol/l	0.332	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.58	
	mmol/l	0.337	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.66	

CALIBRATION SERUM LEVEL 2 (CAL 2)

Roche Cobas C311® Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Albumin	g/l	42.8	Bromocresol Green
	g/dl	4.28	
Alkaline Phosphatase	U/l	173	Roche Integra AMP buffer 37°C
	U/l	135	Roche Integra AMP buffer 30°C
	U/l	111	Roche Integra AMP buffer 25°C
ALT (GPT)	U/l	39	Tris buffer without P5P 37°C
	U/l	29	Tris buffer without P5P 30°C
	U/l	22	Tris buffer without P5P 25°C
Amylase Total	U/l	90	Roche liquid stable pNPG7 37°C
AST (GOT)	U/l	40	Tris buffer without P5P 37°C
	U/l	27	Tris buffer without P5P 30°C
	U/l	19	Tris buffer without P5P 25°C
Bicarbonate	mmol/l	11.7	Enzymatic
Bilirubin Direct	µmol/l	19.5	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.14	
	µmol/l	20.3	Roche DPD JG standardised
	mg/dl	1.19	
	µmol/l	18.2	
Bilirubin Total	mg/dl	1.06	Roche DPD Doumas standardised
	µmol/l	24.7	
	mg/dl	1.44	Diazo with Sulphanilic Acid
	µmol/l	24.1	
	mg/dl	1.41	Dichlorophenyl Diazonium (DPD)
Calcium	µmol/l	23.5	
	mg/dl	1.38	Diazonium ion
	mmol/l	2.09	
	mg/dl	8.38	Cresolphthalein complexone
	mmol/l	2.11	
Chloride	mg/dl	8.46	NM-BAPTA
	mmol/l	92.3	
	mmol/l	4.21	Cholesterol Oxidase - Abell Kendall
	mg/dl	163	
	mmol/l	4.21	Cholesterol Oxidase - IDMS
Cholesterol	mg/dl	163	
	U/l	203	CK-NAC (IFCC) 37°C
	U/l	127	
	U/l	86	
	U/l	127	CK-NAC (IFCC) 30°C
CK Total	U/l	86	
	U/l	86	CK-NAC (IFCC) 25°C
	U/l	86	
Creatinine	µmol/l	137	Roche Creatinine Plus
	mg/dl	1.54	

CALIBRATION SERUM LEVEL 2 (CAL 2)

Roche Cobas C311® Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Creatinine	μmol/l	157	Jaffe rate blanked comp. (-26 μmol/l)
	mg/dl	1.77	
gamma-GT	U/l	46	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	36	Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	28	Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C
	U/l	53	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	42	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	33	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
Glucose	mmol/l	6.35	Hexokinase
	mg/dl	114	
Iron	μmol/l	19.4	Colorimetric without ppt.
	μg/dl	108	
Lactate	mmol/l	1.54	Colorimetric Lactate Oxidase
	mg/dl	13.9	
LD (LDH)	U/l	219	L->P IFCC 37°C
	U/l	158	L->P IFCC 30°C
	U/l	111	L->P IFCC 25°C
Lipase	U/l	33	Roche Colorimetric 37°C
Magnesium	mmol/l	0.919	Xylidyl Blue
	mg/dl	2.23	
	mmol/l	0.955	Chlorphosphonazo III
Phosphate Inorganic	mmol/l	1.52	Phosphomolybdate UV
	mg/dl	4.71	
Potassium	mmol/l	4.05	ISE method - indirect
Protein Total	g/l	59.3	Biuret reaction end point
	g/dl	5.93	
Sodium	mmol/l	143	ISE method - indirect
Triglycerides	mmol/l	1.14	Lipase/GPO-PAP no correction
	mg/dl	101	
Urea	mmol/l	7.74	Urease kinetic
	mg/dl	46.5	
	mmol/l	7.74	BUN
Uric Acid (Urate)	mmol/l	0.343	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.76	
	mmol/l	0.344	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.78	
	mmol/l	0.343	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.76	

CALIBRATION SERUM LEVEL 2 (CAL 2)

Roche Cobas c701 / c702 / c711 Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Albumin	g/l	42.7	Bromocresol Green
	g/dl	4.27	
	g/l	41.8	Bromocresol Purple
	g/dl	4.18	
	g/l	41.5	Turbidimetric Assays
	g/dl	4.15	
Alkaline Phosphatase	U/l	170	Roche Integra AMP buffer 37°C
	U/l	132	Roche Integra AMP buffer 30°C
	U/l	109	Roche Integra AMP buffer 25°C
	U/l	183	Colorimetric 37°C
	U/l	143	Colorimetric 30°C
	U/l	117	Colorimetric 25°C
ALT (GPT)	U/l	39	Colorimetric 37°C
	U/l	29	Colorimetric 30°C
	U/l	22	Colorimetric 25°C
	U/l	38	Tris buffer without P5P 37°C
	U/l	28	Tris buffer without P5P 30°C
	U/l	21	Tris buffer without P5P 25°C
Amylase Total	U/l	88	Roche liquid stable pNPG7 37°C
AST (GOT)	U/l	39	Tris buffer without P5P 37°C
	U/l	26	Tris buffer without P5P 30°C
	U/l	19	Tris buffer without P5P 25°C
Bicarbonate	mmol/l	12.1	Enzymatic
Bilirubin Direct	µmol/l	18.5	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.08	
	µmol/l	19.0	Roche DPD JG standardised
	mg/dl	1.11	
	µmol/l	14.7	Oxidation to Biliverdin/Vanadate
	mg/dl	0.857	
Bilirubin Total	µmol/l	15.8	Roche DPD Doumas standardised
	mg/dl	0.925	
	µmol/l	24.1	Dichlorophenyl Diazonium (DPD)
	mg/dl	1.41	
	µmol/l	24.4	Diazonium ion
	mg/dl	1.43	
Calcium	mmol/l	2.10	Cresolphthalein complexone
	mg/dl	8.42	
	mmol/l	2.09	NM-BAPTA
	mg/dl	8.38	

CALIBRATION SERUM LEVEL 2 (CAL 2)

Roche Cobas c701 / c702 / c711 Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Chloride	mmol/l	93.3	ISE indirect
Cholesterol	mmol/l	4.11	Cholesterol Oxidase - Abell Kendall
	mg/dl	159	
	mmol/l	4.17	Cholesterol Oxidase - IDMS
	mg/dl	161	
Cholinesterase	U/l	5629	Colorimetric Butyrylthiocholine 37°C
CK Total	U/l	206	CK-NAC (IFCC) 37°C
	U/l	129	CK-NAC (IFCC) 30°C
	U/l	88	CK-NAC (IFCC) 25°C
Creatinine	µmol/l	137	Roche Creatinine Plus
	mg/dl	1.54	
	µmol/l	189	Jaffe rate blanked comp. (-26 µmol/l)
	mg/dl	2.14	
gamma-GT	U/l	45	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	35	Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	28	Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C
	U/l	52	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	41	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 30°C
	U/l	32	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 25°C
Glucose	mmol/l	6.27	Hexokinase
	mg/dl	113	
Iron	µmol/l	18.6	Colorimetric with ppt.
	µg/dl	104	
	µmol/l	18.6	Colorimetric without ppt.
	µg/dl	104	
Lactate	mmol/l	1.51	Colorimetric Lactate Oxidase
	mg/dl	13.6	
LD (LDH)	U/l	221	L->P IFCC 37°C
	U/l	160	L->P IFCC 30°C
	U/l	112	L->P IFCC 25°C
Lithium	mmol/l	1.00	Spectrophotometric
	mg/dl	0.694	
Magnesium	mmol/l	0.941	Xylidyl Blue
	mg/dl	2.29	
Phosphate Inorganic	mmol/l	1.49	Phosphomolybdate UV
	mg/dl	4.62	
Potassium	mmol/l	4.01	ISE method - indirect
Protein Total	g/l	58.4	Biuret reaction end point
	g/dl	5.84	
Sodium	mmol/l	143	ISE method - indirect
TIBC	µmol/l	42.5	FE+UIBC(saturation with iron)
	µg/dl	237	
Triglycerides	mmol/l	1.12	Lipase/GPO-PAP no correction
	mg/dl	99.1	

CALIBRATION SERUM LEVEL 2 (CAL 2)

Roche Cobas c701 / c702 / c711 Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Triglycerides	mmol/l	1.13	L/G Kinase EP. no correction
	mg/dl	100	
Urea	mmol/l	7.42	Urease kinetic
	mg/dl	44.6	
	mmol/l	7.42	BUN
	mg/dl	20.8	
Uric Acid (Urate)	mmol/l	0.331	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.56	
	mmol/l	0.331	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.56	
	mmol/l	0.327	Uricase Peroxidase with ascorbate oxidase @ 546nm
	mg/dl	5.49	



CALIBRATION SERUM LEVEL 2 (CAL 2)

RX SERIES® Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Creatinine	μmol/l	128	Alkaline picrate no deproteinization
	mg/dl	1.45	

CALIBRATION SERUM LEVEL 2 (CAL 2)

SIEMENS ADVIA 1200/1650/1800/2400® Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Albumin	g/l	39.9	Bromocresol Green
	g/dl	3.99	
Alkaline Phosphatase	U/l	169	AMP optimised to IFCC 37°C
ALT (GPT)	U/l	46	Tris buffer without P5P 37°C
Amylase Total	U/l	92	Siemens - blocked pNPG7 37°C
AST (GOT)	U/l	47	Tris buffer without P5P 37°C
Bicarbonate	mmol/l	14.1	Enzymatic
Bilirubin Direct	µmol/l	15.6	Oxidation to Biliverdin/Vanadate
	mg/dl	0.913	
Bilirubin Total	µmol/l	28.4	Oxidation to Biliverdin/Vanadate
	mg/dl	1.66	
Calcium	mmol/l	2.10	Arsenazo III
	mg/dl	8.42	
Chloride	mmol/l	95.6	ISE indirect
Cholesterol	mmol/l	4.11	Cholesterol Oxidase - Abell Kendall
	mg/dl	159	
CK Total	U/l	208	CK-NAC (IFCC) 37°C
Creatinine	µmol/l	127	Enzymatic UV method
	mg/dl	1.44	
	µmol/l	127	Jaffe rate blanked comp. (-26 µmol/l)
	mg/dl	1.44	
gamma-GT	U/l	46	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
Glucose	mmol/l	6.19	Hexokinase
	mg/dl	112	
	mmol/l	6.35	Glucose oxidase
	mg/dl	114	
Iron	µmol/l	19.3	Colorimetric with ppt.
	µg/dl	108	
	µmol/l	19.6	Colorimetric without ppt.
	µg/dl	110	
Lactate	mmol/l	1.41	Colorimetric Lactate Oxidase
	mg/dl	12.7	
LD (LDH)	U/l	433	P->L German methods 37°C
	U/l	222	L->P IFCC 37°C
Lipase	U/l	38	Other Colorimetric 37°C
Magnesium	mmol/l	0.863	Xylidyl Blue
	mg/dl	2.10	
Phosphate Inorganic	mmol/l	1.51	Phosphomolybdate UV
	mg/dl	4.68	

CALIBRATION SERUM LEVEL 2 (CAL 2)

SIEMENS ADVIA 1200/1650/1800/2400® Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Potassium	mmol/l	4.00	ISE method - indirect
Protein Total	g/l	57.8	Biuret reaction end point
	g/dl	5.78	
Sodium	mmol/l	143	ISE method - indirect
Triglycerides	mmol/l	1.16	Lipase/GPO-PAP no correction
	mg/dl	103	
Urea	mmol/l	7.99	Urease kinetic
	mg/dl	48.0	
	mmol/l	7.99	BUN
	mg/dl	22.4	
Uric Acid (Urate)	mmol/l	0.340	Uricase peroxidase with ascorbate oxidase
	mg/dl	5.71	
	mmol/l	0.346	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.81	

CALIBRATION SERUM LEVEL 2 (CAL 2)

Siemens Atellica Solution Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Albumin	g/l	40.8	Bromocresol Green
	g/dl	4.08	
	g/l	41.9	Bromocresol Purple
	g/dl	4.19	
Alkaline Phosphatase	U/l	171	Siemens Dimension AMP buffer 37°C
	U/l	173	AMP optimised to IFCC 37°C
ALT (GPT)	U/l	44	Tris buffer without P5P 37°C
Amylase Pancreatic	U/l	71	Immunoinhibition EPS substrate 37°C
Amylase Total	U/l	100	Siemens - blocked pNPG7 37°C
AST (GOT)	U/l	44	Tris buffer without P5P 37°C
Bilirubin Direct	µmol/l	16.1	Oxidation to Biliverdin/Vanadate
	mg/dl	0.942	
Bilirubin Total	µmol/l	29.3	Oxidation to Biliverdin/Vanadate
	mg/dl	1.71	
Calcium	mmol/l	2.06	Cresolphthalein complexone
	mg/dl	8.26	
	mmol/l	2.14	Arsenazo III
	mg/dl	8.58	
Chloride	mmol/l	96.9	ISE indirect
Cholesterol	mmol/l	4.17	Cholesterol Oxidase - Abell Kendall
	mg/dl	161	
CK Total	U/l	202	CK-NAC (IFCC) 37°C
Creatinine	µmol/l	128	Jaffe rate blanked
	mg/dl	1.45	
	µmol/l	151	Jaffe rate blanked comp. (-26 µmol/l)
	mg/dl	1.71	
gamma-GT	U/l	49	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
Glucose	mmol/l	6.24	Hexokinase
	mg/dl	112	
	mmol/l	6.53	Glucose oxidase
	mg/dl	118	
Iron	µmol/l	19.3	Colorimetric without ppt.
	µg/dl	108	
Lactate	mmol/l	1.37	Colorimetric Lactate Oxidase
	mg/dl	12.3	
LD (LDH)	U/l	217	L->P IFCC 37°C
Lipase	U/l	37	Other Colorimetric 37°C
Magnesium	mmol/l	0.873	Xylidyl Blue
	mg/dl	2.12	

CALIBRATION SERUM LEVEL 2 (CAL 2)

Siemens Atellica Solution Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Phosphate Inorganic	mmol/l	1.53	Phosphomolybdate UV
	mg/dl	4.74	
Potassium	mmol/l	3.93	ISE method - indirect
Protein Total	g/l	58.5	Biuret reaction end point
	g/dl	5.85	
Sodium	mmol/l	142	ISE method - indirect
TIBC	μmol/l	48.5	Direct Colorimetric
	μg/dl	271	
Triglycerides	mmol/l	1.17	Lipase/GPO-PAP no correction
	mg/dl	104	
Urea	mmol/l	7.87	Urease kinetic
	mg/dl	47.3	
	mmol/l	7.87	BUN
	mg/dl	22.1	
Uric Acid (Urate)	mmol/l	0.343	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.76	

CALIBRATION SERUM LEVEL 2 (CAL 2)

SIEMENS DIMENSION EXL® Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Albumin	g/l	42.1	Bromocresol Purple
	g/dl	4.21	
Alkaline Phosphatase	U/l	174	Siemens Dimension AMP buffer 37°C
ALT (GPT)	U/l	48	Tris buffer with P5P 37°C
	U/l	48	Siemens Dade Standard Non IFCC Correlated 37°C
Amylase Total	U/l	94	Siemens 2-chloro-pNPG3 37°C
AST (GOT)	U/l	55	Tris buffer with P5P 37°C
	U/l	54	Siemens Dade Standard Non IFCC Correlated 37°C
Bilirubin Direct	µmol/l	12.8	Diazo/Sulphanilic Siemens Dimension
	mg/dl	0.750	
Bilirubin Total	µmol/l	26.9	Diazo with Sulphanilic Acid
	mg/dl	1.57	
Calcium	mmol/l	1.96	Cresolphthalein complexone
	mg/dl	7.86	
Chloride	mmol/l	94.0	ISE indirect
Cholesterol	mmol/l	3.69	Dimension-Siemens reagents
	mg/dl	142	
CK Total	U/l	190	CK-NAC (IFCC) 37°C
Creatinine	µmol/l	136	Alkaline picrate no deproteinization
	mg/dl	1.54	
	µmol/l	132	Jaffe rate blanked
gamma-GT	U/l	56	Gamma Glutamyl-3-Carboxy-4-nitroanilide (IFCC) 37°C
	U/l	64	Siemens Dimension (non IFCC) 37°C
Glucose	mmol/l	6.46	Hexokinase
	mg/dl	116	
Iron	µmol/l	18.1	Colorimetric without ppt.
	µg/dl	101	
LD (LDH)	U/l	204	L->P IFCC 37°C
Magnesium	mmol/l	0.899	Methylthymol blue
	mg/dl	2.18	
Phosphate Inorganic	mmol/l	1.53	Phosphomolybdate enzymatic
	mg/dl	4.74	
	mmol/l	1.59	Phosphomolybdate UV
Potassium	mmol/l	4.93	
	mg/dl	4.93	
Potassium	mmol/l	3.88	ISE method - indirect
Protein Total	g/l	60.3	Biuret reaction end point
	g/dl	6.03	
Sodium	mmol/l	141	ISE method - indirect

CALIBRATION SERUM LEVEL 2 (CAL 2)

SIEMENS DIMENSION EXL® Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Triglycerides	mmol/l	1.06	Lipase/GPO-PAP no correction
	mg/dl	93.8	
	mmol/l	1.04	L/G Kinase EP. no correction
	mg/dl	92.0	
Urea	mmol/l	7.76	Urease kinetic
	mg/dl	46.6	
	mmol/l	7.76	BUN
	mg/dl	21.8	
Uric Acid (Urate)	mmol/l	0.342	Uricase peroxidase no ascorbate oxidase
	mg/dl	5.75	
	mmol/l	0.331	Spectrophotometric at 280-290
	mg/dl	5.56	

CALIBRATION SERUM LEVEL 2 (CAL 2)

SIEMENS DIMENSION RxL/Max/Xpand® Lot. No. 1590UN Cat. No. CAL2350

Size 20 x 5ml Expiry 2025-07-28

Analyte	unit	Target	methods
Alkaline Phosphatase	U/l	180	Siemens Dimension AMP buffer 37°C
Amylase Total	U/l	94	Siemens 2-chloro-pNPG3 37°C
Bilirubin Total	µmol/l	26.7	Diazo with Sulphanilic Acid
	mg/dl	1.56	
Chloride	mmol/l	95.9	ISE indirect
CK Total	U/l	194	CK-NAC (IFCC) 37°C
Creatinine	µmol/l	134	Alkaline picrate no deproteinization
	mg/dl	1.52	
Glucose	mmol/l	6.42	Hexokinase
	mg/dl	116	
HDL - Cholesterol	mmol/l	1.44	Direct HDL PEGME
	mg/dl	55.6	
Magnesium	mmol/l	0.890	Methylthymol blue
	mg/dl	2.16	
Potassium	mmol/l	4.00	ISE method - indirect
Protein Total	g/l	59.8	Biuret reaction end point
	g/dl	5.98	
Sodium	mmol/l	144	ISE method - indirect
Triglycerides	mmol/l	1.07	Lipase/GPO-PAP no correction
	mg/dl	94.7	
Urea	mmol/l	7.60	Urease kinetic
	mg/dl	45.7	