

MEASURE Human Lyo L-1
for MESURE Reagent

Lot. 116ADL

(White Cap)

2°C~8°C

EXP. 2026.06.

Component	Analytical value		1SD	Acceptable range		Method/Instrument	Traceability
Albumin	41.1	g/L	1.37	37.0	45.2	BCG / Hitachi-7180	JCCRM613
	4.11	g/dL	0.137	3.70	4.52	±3SD range by MEASURE Reagent	(ERM DA470)
ALT	44.4	U/L	1.48	40.0	48.8	JSCC at 37°C (IFCC w/o PalP) / Hitachi-7180	JCCRM001d
	0.74	μkat/L	0.025	0.67	0.82	±3SD range by MEASURE Reagent	
ALP	107	U/L	5.3	90.6	123	IFCC at 37°C / Hitachi-7180	JCCRM001d (IFCC)
	1.78	μkat/L	0.089	1.51	2.05	±3SD range by MEASURE Reagent	
ALP IFCC	95.2	U/L	4.8	80.9	109	IFCC at 37°C / Hitachi-7180	JCCRM001d (IFCC)
	1.59	μkat/L	0.079	1.35	1.83	±3SD range by MEASURE Reagent	
Amylase, total	102	U/L	5.10	86.7	117	IFCC at 37°C / Hitachi-7180	JCCRM001d
	1.70	μkat/L	0.085	1.45	1.96	±3SD range by MEASURE Reagent	
AST	42.0	U/L	1.40	37.8	46.2	JSCC at 37°C (IFCC w/o PalP) / Hitachi-7180	JCCRM001d
	0.70	μkat/L	0.023	0.63	0.77	±3SD range by MEASURE Reagent	
Bile Acid	18.1	μmol/L	1.81	12.7	23.5	Enzymatic (3-α-HDS) / Hitachi-7180	Gravimetry
	7.03	mg/L	0.703	4.92	9.14	±3SD range by MEASURE Reagent	
Bilirubin, direct	9.06	μmol/L	0.755	6.80	11.3	Enzymatic / Hitachi-7180	NIST
	0.53	mg/dL	0.044	0.40	0.66	±3SD range by MEASURE Reagent	
Bilirubin, total	16.8	μmol/L	0.56	15.1	18.4	Enzymatic / Hitachi-7180	NIST
	0.98	mg/dL	0.033	0.88	1.08	±3SD range by MEASURE Reagent	
Cholesterol, total	4.09	mmol/L	0.136	3.68	4.50	CHOD-PAP / Hitachi-7180	JCCRM223
	158	mg/dL	5.3	142	174	±3SD range by MEASURE Reagent	(SRM1951a)
HDL Cholesterol	1.44	mmol/L	0.096	1.15	1.73	Direct enzymatic colorimetry / Hitachi-7180	JCCRM223
	55.6	mg/dL	3.71	44.5	66.7	±3SD range by MEASURE Reagent	(SRM1951a)
LDL Cholesterol	2.48	mmol/L	0.124	2.11	2.86	Direct enzymatic colorimetry / Hitachi-7180	JCCRM223
	95.9	mg/dL	4.80	81.5	110	±3SD range by MEASURE Reagent	(SRM1951a)
CK	97.9	U/L	4.90	83.2	113	JSCC at 37°C / Hitachi-7180	JCCRM001d
	1.63	μkat/L	0.082	1.39	1.88	±3SD range by MEASURE Reagent	
CK-MB	27.3	U/L	3.64	16.4	38.2	Immunological UV / Hitachi-7180	Internal SOP
	0.46	μkat/L	0.061	0.27	0.64	±3SD range by MEASURE Reagent	
Creatinine	81.3	μmol/L	4.07	69.1	93.5	Enzymatic / Hitachi-7180	JCCRM521
	0.92	mg/dL	0.046	0.78	1.06	±3SD range by MEASURE Reagent	(ID-MS)
GGT	37.6	U/L	1.50	33.1	42.1	JSCC at 37°C / Hitachi-7180	JCCRM001d
	0.63	μkat/L	0.025	0.55	0.70	±3SD range by MEASURE Reagent	
Glucose	4.28	mmol/L	0.143	3.85	4.71	HDAOS-POD / Hitachi-7180	JCCRM521
	77.1	mg/dL	2.57	69.4	84.8	±3SD range by MEASURE Reagent	(ID-MS/SRM917)
LDH	146	U/L	4.9	131	160	JSCC at 37°C / Hitachi-7180	JCCRM001d
	2.43	μkat/L	0.081	2.19	2.67	±3SD range by MEASURE Reagent	
LDH IFCC	150	U/L	5.0	135	165	IFCC at 37°C / Hitachi-7180	JCCRM001d
	2.51	μkat/L	0.084	2.25	2.76	±3SD range by MEASURE Reagent	
Protein, total	64.2	g/L	2.14	57.8	70.6	Modified Biuret / Hitachi-7180	JCCRM613
	6.42	g/dL	0.214	5.78	7.06	±3SD range by MEASURE Reagent	(sm927)
Trglyceride	0.77	mmol/L	0.026	0.69	0.84	GPO/PAP	JCCRM223
	67.2	mg/dL	2.24	60.5	73.9	±3SD range by MEASURE Reagent	(ID-MS)
(TG-T)	1.10	mmol/L	0.037	0.99	1.22	GPO/PAP	JCCRM223
	96.9	mg/dL	3.23	87.2	107	±3SD range by MEASURE Reagent	(ID-MS)
Urea Nitrogen	4.76	mmol/L	0.159	4.29	5.24	Urease-UV / Hitachi-7180	JCCRM521
	13.3	mg/dL	0.44	12.0	14.6	±3SD range by MEASURE Reagent	(id-ms/srm912)
Uric acid	292	μmol/L	9.7	263	321	Uricase-POD / Hitachi-7180	JCCRM521
	4.91	mg/dL	0.164	4.42	5.40	±3SD range by MEASURE Reagent	(ID-MS)

Acceptable range : ± 3SD

UMA Co.,Ltd.

Tester	Quality Control Manager	Manufacturing Control Manager
		

MEASURE Human Lyo L-1**(Other Method)****Lot. 116ADL****(White Cap)****2°C ~ 8°C****EXP. 2026.06.**

Component	Analytical value	U *	Acceptable range	Method/Instrument	Traceability
ALT	45.0 U/L 0.75 μ kat/L	4 0.07	41.0 - 49.0 0.68 - 0.82	IFCC 37°C with PalP	IFCC
Albumin	41.4 g/L 4.14 g/dL	3.8 0.38	37.6 - 45.2 3.76 - 4.52	BCG	CRM470
ALP	99.0 U/L 1.65 μ kat/L	10 0.17	89.0 - 109 1.49 - 1.82	IFCC at 37°C	IFCC
Amylase, total	99.0 U/L 1.65 μ kat/L	7 0.12	92.0 - 106 1.54 - 1.77	IFCC at 37°C	IFCC
Amylase, pancreas	49.0 U/L 0.82 μ kat/L	3 0.05	46.0 - 52.0 0.77 - 0.87	Enzymatic colorimetry 37°C	
AST	44.0 U/L 0.73 μ kat/L	4 0.07	40.0 - 48.0 0.67 - 0.80	IFCC 37°C with PalP	IFCC
Bilirubin, direct	4.70 μ mol/L 0.27 mg/dL	0.7 0.04	4.00 - 5.40 0.23 - 0.32	Diazo	
Bilirubin, total	13.7 μ mol/L 0.80 mg/dL	2.0 0.12	11.7 - 15.7 0.68 - 0.92	DPD	Doumas method
Calucium	2.17 mmol/L 8.70 mg/dL	0.15 0.60	2.02 - 2.32 8.10 - 9.30	NM-BAPTA	SRM909b
Chloride	106 mmol/L	5	101 - 111	Indirect ISE	Gravimetry
Cholesterol, total	3.95 mmol/L 153 mg/dL	0.24 9	3.71 - 4.19 143 - 162	CHOD/PAP	ID-MS
HDL Cholesterol	1.17 mmol/L 45.2 mg/dL	0.22 9	0.95 - 1.39 36.7 - 53.8	Direct enzymatic colorimetry	SRM1951a
LDL Cholesterol	2.30 mmol/L 88.9 mg/dL	0.20 8	2.10 - 2.50 81.2 - 96.7	Direct enzymatic colorimetry	SRM1951a
CK	104 U/L 1.74 μ kat/L	8 0.13	96.0 - 112 1.60 - 1.87	IFCC at 37°C	IFCC
CK-MB	20.0 U/L 0.33 μ kat/L	5 0.08	15.0 - 25.0 0.25 - 0.42	Immunological UV	ERM-AD455/IFCC
Copper	16.1 μ mol/L 102 μ g/dL	1.2 8	14.9 - 17.3 95 - 110	ICP-MS	SRM 3114
Creatinine	75.5 μ mol/L 0.85 mg/dL	6 0.07	69.5 - 81.5 0.79 - 0.92	Enzymatic colorimetry	ID-MS
Digoxin	0.994 nmol/L			LIA Access	
GGT	36.0 U/L 0.60 μ kat/L	3 0.05	33.0 - 39.0 0.55 - 0.65	IFCC at 37°C	IFCC
GLDH	5.20 U/L 0.09 μ kat/L	0.4 0.01	4.80 - 5.60 0.08 - 0.09	DGKC 37°C	
Glucose	4.38 mmol/L 78.9 mg/dL	0.36 6	4.02 - 4.74 72.4 - 85.4	HK/G6P-DH	ID-MS
Iron	17.9 μ mol/L 99.9 μ g/dL	1.4 7.8	16.5 - 19.3 92.1 - 108	Ascorbate/FerroZine	SRM937
Lactate	1.99 mmol/L 17.9 mg/dL	0.2 1.8	1.79 - 2.19 16.1 - 19.7	LOD/POD	Primery reference material
LDH	144 U/L 2.40 μ kat/L	14 0.23	130 - 158 2.17 - 2.64	IFCC at 37°C	IFCC
Lipase	47.0 U/L 0.78 μ kat/L	5 0.08	42.0 - 52.0 0.70 - 0.87	Enzymatic colorimetry 37°C	Roche reagent manual measurement
Lithium	0.795 mmol/L 0.55 mg/dL	0.02 0.01	0.78 - 0.82 0.54 - 0.57	Colorimetry	
Magnesium	0.85 mmol/L 2.07 mg/dL	0.03 0.07	0.82 - 0.88 1.99 - 2.14	Xylidyl-blue	Gravimetry
Phosphorus	1.01 mmol/L 3.13 mg/dL	0.06 0.19	0.95 - 1.07 2.94 - 3.31	Ammonium phosphomoplybdate	Primary reference material
Potassium	3.95 mmol/L	0.15	3.80 - 4.10	Indirect ISE	Gravimetry
Protein total	62.0 g/L 6.20 g/dL	5.1 0.51	56.9 - 67.1 5.69 - 6.71	Biuret	SRM927c
Sodium	139 mmol/L	5	134 - 144	Indirect ISE	Gravimetry
Theophyline	71.8 μ mol/L			KIMS	Gravimetry
Total Bile Acid	25.6 μ mol/L 9.98 mg/L	4 1.56	21.6 - 29.6 8.42 - 11.5	Enzymatic endpoint	

2°C ~ 8°C

EXP. 2026.06.

Component	Analytical value		U *	Acceptable range	Method/Instrument	Traceability
Trglyceride	1.12	mmol/L	0.08	1.04 - 1.20	GPO/PAP	ID-MS
	99.2	mg/dL	7	92.1 - 106		
UIBC	39.1	μmol/L	5.5	33.6 - 44.6	FeroZine®	Primary reference material
	218	μg/dL	31	188 - 249		
Urea	4.46	mmol/L	0.4	4.06 - 4.86	Urease/GLZDH	SRM909b
	12.5	mg/dL	1.1	11.4 - 13.6		
Uric acid	289	μmol/L	19	270 - 308	Uricase/POD	ID-MS
	4.86	mg/dL	0.32	4.54 - 5.18		
Zinc	27.9	μmol/L	2.6	25.3 - 30.5	ICP-MS	SRM 3168a
	182	μg/dL	17	165 - 199		

*(u) : uncertainty

Acceptable range : ± 3SD

The following component will be removed from this lot and later, because the manufacturer's assigned values are not available.

Apo-A, Apo-B CHE, Estoradiol, Ferritin, Folate, HBDH, β-HCG, Homocystaine, IgA, IgG, IgM, NEFA, Osmolality, Phospholipids, Progesterone, f-T3,T3,f-T4,T4,Testosteron, Transferrin, TSH,