

Target Values / Sollwerte / Valores Asignados/ Valeurs Cibles

<https://www.human.de/target-value-sheets/>

	Method Methode Método Méthode * 37°C	SI Units SI Einheiten Unidades SI Unités SI	Target Sollwert Valor asignado Valeur cible	Range Bereich Rango Marge	Units Einheiten Unidades Unités	Target Sollwert Valor asignado Valeur cible	Range Bereich Rango Marge
<b>HUMAN</b>							
ACID PHOSPHATASE	α-Naphtylphosphate *	µkat/l	0.17	0.11 - 0.22	U/l	10.1	6.74 - 13.4
ALBUMIN liquidolor	CRM 470 standardised	g/l	45.6	35.1 - 56.1	g/dl	4.56	3.51 - 5.61
ALKALINE PHOSPHATASE liquidolor	IFCC, AMP Buffer *	µkat/l	5.88	4.41 - 7.35	U/l	353	264 - 441
ALKALINE PHOSPHATASE opt. liquidolor	DGKC, DEA Buffer *	µkat/l	6.35	4.76 - 7.94	U/l	381	286 - 476
alpha-AMYLASE liquidolor	2-chloro-4-nitrophenyl-maltotrioside (CNP3) *	µkat/l	12.5	10.0 - 15.0	U/l	752	602 - 903
alpha-AMYLASE liquidolor	IFCC *	µkat/l	4.82	3.85 - 5.78	U/l	289	231 - 347
APOLIPOPROTEIN A1 (APO A1)	Turbidimetric	g/l	1.30	1.04 - 1.56	mg/dl	130	104 - 156
APOLIPOPROTEIN B (APO B)	Turbidimetric	g/l	0.93	0.74 - 1.11	mg/dl	92.7	74.1 - 111
auto-BILIRUBIN-D liquidolor	DPD	µmol/l	55.2	40.9 - 69.6	mg/dl	3.23	2.39 - 4.07
auto-BILIRUBIN-T liquidolor	DPD	µmol/l	78.7	58.2 - 99.1	mg/dl	4.60	3.40 - 5.80
BILIRUBIN liquidolor	2,4 - Dichloroaniline DCA	µmol/l	78.8	58.3 - 99.3	mg/dl	4.61	3.41 - 5.81
BILIRUBIN DIRECT/TOTAL liquidolor, Direct	Jendrassik-Gróf	µmol/l	51.7	38.2 - 65.1	mg/dl	3.02	2.23 - 3.81
BILIRUBIN DIRECT/TOTAL liquidolor, Total	Jendrassik-Gróf	µmol/l	75.3	55.7 - 94.8	mg/dl	4.40	3.26 - 5.54
CALCIUM liquidolor	o-Cresolphthalein complexone	mmol/l	3.37	3.00 - 3.74	mg/dl	13.5	12.0 - 15.0
Chloride	ISE (direct)	mmol/l	124	113 - 135	mg/dl	439	399 - 478
CHLORIDE liquidolor	TPTZ	mmol/l	127	115 - 138	mg/dl	449	409 - 489
CHOLESTEROL liquidolor	CHOD-PAP	mmol/l	6.46	5.56 - 7.36	mg/dl	250	215 - 285
CHOLINESTERASE liquidolor	Butyrylthiocholine *	µkat/l	104	85.3 - 123	U/l	6239	5,116 - 7,362
CK NAC activated	DGKC optimised *	µkat/l	9.30	7.44 - 11.2	U/l	558	446 - 670
CK NAC activated liquiUV	IFCC *	µkat/l	8.74	6.99 - 10.5	U/l	524	419 - 629
auto-CREATININE liquidolor	Jaffé, kinetic, without deproteinisation	µmol/l	430	335 - 524	mg/dl	4.86	3.79 - 5.93
CREATININE liquidolor	Jaffé, kinetic, without deproteinisation	µmol/l	461	360 - 563	mg/dl	5.22	4.07 - 6.37
CREATININE (enzym) liquidolor	Enzymatic colorimetric test *	µmol/l	463	361 - 565	mg/dl	5.24	4.09 - 6.39
gamma-GT liquidolor	gamma-Glutamyl-3carboxy-4-nitroanilide *	µkat/l	2.65	2.07 - 3.24	U/l	159	124 - 194
GLUCOSE liquidolor	GOD-PAP	mmol/l	12.1	10.2 - 14.1	mg/dl	219	184 - 254
GLUCOSE liquiUV <sup>mono</sup>	Hexokinase /G6P-DH	mmol/l	12.1	10.2 - 14.1	mg/dl	218	183 - 253
GOT (ASAT) IFCC mod. liquiUV	IFCC without pyridoxal phosphate *	µkat/l	2.37	1.83 - 2.92	U/l	142	110 - 175
GPT (ALAT) IFCC mod. liquiUV	IFCC *	µkat/l	2.24	1.72 - 2.75	U/l	134	103 - 165
HDL CHOLESTEROL liquidolor	Direct enzymatic test	mmol/l	2.55	2.04 - 3.06	mg/dl	98.6	78.9 - 118
HDL CHOLESTEROL	CHOD-PAP after precipitation	mmol/l	2.21	1.77 - 2.65	mg/dl	85.4	68.4 - 103
IRON liquidolor	CAB	µmol/l	23.2	20.0 - 26.5	µg/dl	130	112 - 148
IRON TPTZ liquidolor	TPTZ	µmol/l	24.4	21.0 - 27.8	µg/dl	136	117 - 155
IMMUNOGLOBULINS direct IgA	Turbidimetric	g/l	2.02	1.62 - 2.42	mg/dl	202	174 - 230
IMMUNOGLOBULINS direct IgG	Turbidimetric	g/l	9.74	7.79 - 11.7	mg/dl	974	837 - 1,110
IMMUNOGLOBULINS direct IgM	Turbidimetric	g/l	0.84	0.67 - 1.01	mg/dl	83.9	72.2 - 95.7
LDH SCE mod. liquiUV	SCE mod. Pyruvate - Lactate *	µkat/l	12.0	9.87 - 14.2	U/l	722	592 - 852
LDL CHOLESTEROL liquidolor	Direct enzymatic test	mmol/l	3.42	2.74 - 4.10	mg/dl	132	106 - 159
LIPASE liquidolor	Enzymatic colorimetric test *	µkat/l	1.05	0.84 - 1.26	U/l	63.0	50.4 - 75.6
LIPASE liquidolor - FROM LOT #21501 HUMASTAR 100, 200, 300SR	Enzymatic colorimetric test *	µkat/l	1.28	1.02 - 1.53	U/l	76.6	61.3 - 91.9
LIPOPROTEIN (a), Lp(a)	Turbidimetric	g/l	0.10	0.08 - 0.12	mg/dl	10.1	8.09 - 12.1
MAGNESIUM liquidolor	Xylidyl blue	mmol/l	1.28	1.08 - 1.49	mg/dl	3.12	2.62 - 3.62
PANCREAS-AMYLASE liquidolor	EPS-G7 *	µkat/l	3.35	2.68 - 4.02	U/l	201	161 - 241
PHOSPHORUS liquirapid	Phosphomolybdate	mmol/l	2.92	2.39 - 3.44	mg/dl	9.03	7.40 - 10.7
Potassium	ISE (direct)	mmol/l	6.61	5.95 - 7.27	mval/l	6.61	5.95 - 7.27
POTASSIUM liquirapid	Tetraphenylboron	mmol/l	5.84	5.26 - 6.42	mval/l	5.84	5.26 - 6.42
POTASSIUM liquiUV	Enzymatic UV Test	mmol/l	6.72	6.05 - 7.39	mval/l	6.72	6.05 - 7.39
Sodium	ISE (direct)	mmol/l	165	148 - 181	mval/l	165	148 - 181
SODIUM liquidolor	Enzymatic colorimetric test	mmol/l	151	136 - 166	mval/l	151	136 - 166
SODIUM rapid	Mg-uranylacetate	mmol/l	139	125 - 153	mval/l	139	125 - 153
TIBC (total Iron binding capacity with IRON liquidolor)	Aluminum oxide adsorption CAB	µmol/l	64.5	51.6 - 77.4	µg/dl	360	288 - 432
TIBC (total Iron binding capacity with IRON TPTZ liquidolor)	Aluminum oxide adsorption TPTZ	µmol/l	72.0	57.6 - 86.4	µg/dl	402	322 - 483

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<b>TOTAL PROTEIN</b> liquicolor	Biuret	g/l	79.6	70.8 - 88.4	g/dl	7.96	7.08 - 8.84
<b>TRIGLYCERIDES</b> liquicolor <sup>mono</sup>	GPO-PAP	mmol/l	2.70	2.21 - 3.18	mg/dl	236	194 - 279
<b>UREA</b> liquicolor	mod. Berthelot reaction	mmol/l	9.25	7.22 - 11.3	mg/dl	55.6	43.3 - 67.8
<b>UREA</b> liquiUV	Urease/GLDH	mmol/l	9.51	7.42 - 11.6	mg/dl	57.1	44.6 - 69.7
<b>URIC ACID</b> liquicolor <sup>plus</sup>	Uricase-PAP	µmol/l	642	552 - 732	mg/dl	10.8	9.29 - 12.3
<b>URIC ACID</b> liquicolor	Uricase-PAP	µmol/l	578	497 - 659	mg/dl	9.72	8.36 - 11.1
<b>Other Manufacturers</b>							
<b>Acid Phosphatase</b>	a-Naphtylphosphate	µkat/l	0.11	0.08 - 0.14	U/l	6.53	4.90 - 8.16
<b>alpha-Amylase</b>	EPS-G7, IFCC *	µkat/l	4.72	3.77 - 5.66	U/l	283	226 - 340
<b>Albumin</b>	CRM470 standardised	g/l	44.5	34.3 - 54.7	g/dl	4.5	3.43 - 5.47
<b>Alkaline Phosphatase</b>	IFCC *	µkat/l	4.45	3.34 - 5.56	U/l	267	200 - 334
<b>Apolipoprotein A1 (APO A1)</b>	Turbidimetric	g/l	1.32	0.98 - 1.67	mg/dl	132	98.0 - 167
<b>Apolipoprotein B (APO B)</b>	Turbidimetric	g/l	0.79	0.59 - 1.00	mg/dl	79.1	58.5 - 99.7
<b>Bilirubin direct</b>	Jendrassik-Gróf	µmol/l	57.8	42.8 - 72.8	mg/dl	3.38	2.50 - 4.26
<b>Bilirubin total</b>	Jendrassik-Gróf	µmol/l	78.5	58.1 - 98.9	mg/dl	4.59	3.40 - 5.78
<b>Calcium</b>	o-Cresolphthalein	mmol/l	3.31	2.95 - 3.67	mg/dl	13.2	11.8 - 14.7
<b>Chloride</b>	ISE	mmol/l	117	106 - 128	mg/dl	415	377 - 452
<b>Cholesterol total</b>	CHOD-PAP	mmol/l	6.21	5.34 - 7.08	mg/dl	240	206 - 274
<b>Cholinesterase</b>	Butyrylthiocholine *	µkat/l	111	90.8 - 131	U/l	6640	5,445 - 7,835
<b>Copper</b>	AAS	µmol/l	17.1	13.7 - 20.6	µg/dl	109	87.1 - 131
<b>Creatine Kinase</b>	NAC activated, IFCC *	µkat/l	8.69	6.95 - 10.4	U/l	521	417 - 625
<b>Creatine Kinase-MB</b>	NAC activated, immunoinhibition *	µkat/l	0.77	0.62 - 0.93	U/l	46.3	37.0 - 55.5
<b>Creatinine</b>	Jaffé kinetic	µmol/l	466	363 - 568	mg/dl	5.27	4.11 - 6.43
<b>gamma-GT</b>	γ-Glutamyl-4-nitroanilide *	µkat/l	2.57	2.00 - 3.13	U/l	154	120 - 188
<b>Glucose</b>	Hexokinase /G6P-DH	mmol/l	12.2	10.2 - 14.1	mg/dl	219	184 - 254
<b>GOT (ASAT)</b>	IFCC *	µkat/l	2.23	1.72 - 2.75	U/l	134	103 - 165
<b>GPT (ALAT)</b>	IFCC *	µkat/l	2.12	1.63 - 2.60	U/l	127	97.8 - 156
<b>Haptoglobulin</b>	Turbidimetric	g/l	1.34	1.03 - 1.65	mg/dl	134	103 - 165
<b>HDL-Cholesterol</b>	Direct enzymatic test	mmol/l	2.11	1.69 - 2.53	mg/dl	81.5	65.2 - 97.8
<b>Immunoglobulin A (IgA)</b>	Turbidimetric	g/l	2.03	1.62 - 2.44	mg/dl	203	162 - 244
<b>Immunoglobulin G (IgG)</b>	Turbidimetric	g/l	9.67	7.74 - 11.6	mg/dl	967	774 - 1,160
<b>Immunoglobulin M (IgM)</b>	Turbidimetric	g/l	0.87	0.70 - 1.04	mg/dl	87.0	69.6 - 104
<b>Iron</b>	Ferrozine	µmol/l	24.2	20.8 - 27.5	µg/dl	135	116 - 154
<b>Lactate Dehydrogenase (LDH)</b>	IFCC Lactate - Pyruvate *	µkat/l	5.55	4.55 - 6.55	U/l	333	273 - 393
<b>LDL-Cholesterol</b>	Direct enzymatic test	mmol/l	2.95	2.36 - 3.54	mg/dl	114	91.2 - 137
<b>Lipase</b>	Enzymatic colorimetric test *	µkat/l	1.12	0.89 - 1.34	U/l	67.0	53.6 - 80.4
<b>Lipoprotein (a), Lp(a)</b>	Turbidimetric	g/l	0.11	0.09 - 0.13	mg/dl	11.0	8.76 - 13.1
<b>Lithium</b>	Colorimetric	mmol/l	2.20	1.89 - 2.51	mval/l	2.20	1.89 - 2.51
<b>Magnesium</b>	Xylydyl blue	mmol/l	1.28	1.08 - 1.48	mg/dl	3.11	2.61 - 3.61
<b>Phosphorus</b>	Molybdate UV	mmol/l	2.75	2.26 - 3.25	mg/dl	8.52	6.98 - 10.0
<b>Potassium</b>	ISE (indirect)	mmol/l	6.31	5.68 - 6.94	mval/l	6.31	5.68 - 6.94
<b>Protein total</b>	Biuret	g/l	68.1	60.6 - 75.6	g/dl	6.81	6.06 - 7.56
<b>Sodium</b>	ISE (indirect)	mmol/l	153	138 - 168	mval/l	153	138 - 168
<b>Triglycerides</b>	GPO-PAP	mmol/l	2.66	2.18 - 3.13	mg/dl	233	191 - 275
<b>Urea</b>	Urease	mmol/l	8.66	6.75 - 10.6	mg/dl	52.0	40.6 - 63.4
<b>Uric Acid</b>	Enzymatic colorimetric test	µmol/l	638	549 - 728	mg/dl	10.7	9.23 - 12.2
<b>Zinc</b>	AAS	µmol/l	10.1	8.11 - 12.2	µg/dl	66.3	53.0 - 79.5

<b>Protein Fractions</b>					
Albumin	Electrophoresis with cellulose foil Ponceau S dye	%	61.80	49.44 - 74.16	
a1-Globulin		%	3.81	2.67 - 4.95	
a2-Globulin		%	10.08	8.06 - 12.10	
b-Globulin		%	11.32	9.06 - 13.58	
g-Globulin		%	13.02	8.85 - 17.19	