

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
HUMAN							
ACID PHOSPHATASE	α-Naphtylphosphate *	µkat/l	0.17	0.11 - 0.22	U/l	10.1	6.74 - 13.4
ALBUMIN liquicolor	CRM 470 standardised	g/l	45.6	35.1 - 56.1	g/dl	4.56	3.51 - 5.61
ALKALINE PHOSPHATASE liquicolor	IFCC, AMP Buffer *	µkat/l	5.88	4.41 - 7.35	U/l	353	264 - 441
ALKALINE PHOSPHATASE opt. liquicolor	DGKC, DEA Buffer *	µkat/l	7.91	5.93 - 9.89	U/l	475	356 - 593
alpha-AMYLASE liquicolor	2-chloro-4-nitrophenyl-maltotriose (CNP3) *	µkat/l	12.5	10.0 - 15.0	U/l	752	602 - 903
alpha-AMYLASE liquicolor	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 liquicolor	DPD	µmol/l	55.2	40.9 - 69.6	mg/dl	3.23	2.39 - 4.07
auto-BILIRUBIN-T liquicolor	DPD	µmol/l	78.7	58.2 - 99.1	mg/dl	4.60	3.40 - 5.80
BILIRUBIN liquicolor	2,4 - Dichloroaniline DCA	µmol/l	78.8	58.3 - 99.3	mg/dl	4.61	3.41 - 5.81
BILIRUBIN DIRECT/TOTAL liquicolor, Direct	Jendrassik-Gróf	µmol/l	51.7	38.2 - 65.1	mg/dl	3.02	2.23 - 3.81
BILIRUBIN DIRECT/TOTAL liquicolor, Total	Jendrassik-Gróf	µmol/l	75.3	55.7 - 94.8	mg/dl	4.40	3.26 - 5.54
CALCIUM liquicolor	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 liquicolor	TPTZ	mmol/l	127	115 - 138	mg/dl	449	409 - 489
CHOLESTEROL liquicolor	CHOD-PAP	mmol/l	6.46	5.56 - 7.36	mg/dl	250	215 - 285
CHOLINESTERASE liquicolor	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 liquicolor	Jaffé, kinetic, without deproteinisation	µmol/l	430	335 - 524	mg/dl	4.86	3.79 - 5.93
CREATININE liquicolor	Jaffé, kinetic, without deproteinisation	µmol/l	461	360 - 563	mg/dl	5.22	4.07 - 6.37
CREATININE (enzym) liquicolor	Enzymatic colorimetric test *	µmol/l	463	361 - 565	mg/dl	5.24	4.09 - 6.39
gamma-GT liquicolor	gamma-Glutamyl-3carboxy-4-nitroanilide *	µkat/l	2.65	2.07 - 3.24	U/l	159	124 - 194
GLUCOSE liquicolor	GOD-PAP	mmol/l	12.1	10.2 - 14.1	mg/dl	219	184 - 254
GLUCOSE liquiUV ^{mono}	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 liquicolor	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 liquicolor	CAB	µmol/l	23.2	20.0 - 26.5	µg/dl	130	112 - 148
IRON TPTZ liquicolor	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 liquicolor	Direct enzymatic test	mmol/l	3.42	2.74 - 4.10	mg/dl	132	106 - 159
LIPASE liquicolor	Enzymatic colorimetric test *	µkat/l	1.05	0.84 - 1.26	U/l	63.0	50.4 - 75.6
LIPOPROTEIN (a), Lp(a)	Turbidimetric	g/l	0.10	0.08 - 0.12	mg/dl	10.1	8.09 - 12.1
MAGNESIUM liquicolor	Xylidyl blue	mmol/l	1.28	1.08 - 1.49	mg/dl	3.12	2.62 - 3.62
PANCREAS-AMYLASE liquicolor	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 liquicolor	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 liquicolor)	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 liquicolor)	Aluminum oxide adsorption TPTZ	µmol/l	72.0	57.6 - 86.4	µg/dl	402	322 - 483
TOTAL PROTEIN liquicolor	Biuret	g/l	79.6	70.8 - 88.4	g/dl	7.96	7.08 - 8.84

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TRIGLYCERIDES liquicolor ^{mono}	GPO-PAP	mmol/l	2.70	2.21 - 3.18	mg/dl	236	194 - 279
UREA liquicolor	mod. Berthelot reaction	mmol/l	9.25	7.22 - 11.3	mg/dl	55.6	43.3 - 67.8
UREA liquiUV	Urease/GLDH	mmol/l	9.51	7.42 - 11.6	mg/dl	57.1	44.6 - 69.7
URIC ACID liquicolor ^{plus}	Uricase-PAP	µmol/l	642	552 - 732	mg/dl	10.8	9.29 - 12.3
URIC ACID liquicolor	Uricase-PAP	µmol/l	578	497 - 659	mg/dl	9.72	8.36 - 11.1
Other Manufacturers							
Acid Phosphatase	a-Naphtylphosphate	µkat/l	0.11	0.08 - 0.14	U/l	6.53	4.90 - 8.16
alpha-Amylase	EPS-G7, IFCC *	µkat/l	4.72	3.77 - 5.66	U/l	283	226 - 340
Albumin	CRM470 standardised	g/l	445	343 - 547	g/dl	44.5	34.3 - 54.7
Alkaline Phosphatase	IFCC *	µkat/l	4.45	3.34 - 5.56	U/l	267	200 - 334
Apolipoprotein A1 (APO A1)	Turbidimetric	g/l	1.32	0.98 - 1.67	mg/dl	132	98.0 - 167
Apolipoprotein B (APO B)	Turbidimetric	g/l	0.79	0.59 - 1.00	mg/dl	79.1	58.5 - 99.7
Bilirubin direct	Jendrassik-Gróf	µmol/l	57.8	42.8 - 72.8	mg/dl	3.38	2.50 - 4.26
Bilirubin total	Jendrassik-Gróf	µmol/l	78.5	58.1 - 98.9	mg/dl	4.59	3.40 - 5.78
Calcium	o-Cresolphthalein	mmol/l	3.31	2.95 - 3.67	mg/dl	13.2	11.8 - 14.7
Chloride	ISE	mmol/l	117	106 - 128	mg/dl	415	377 - 452
Cholesterol total	CHOD-PAP	mmol/l	6.21	5.34 - 7.08	mg/dl	240	206 - 274
Cholinesterase	Butyrylthiocholine *	µkat/l	111	90.8 - 131	U/l	6640	5,445 - 7,835
Copper	AAS	µmol/l	171	137 - 206	µg/dl	1089	871 - 1,307
Creatine Kinase	NAC activated, IFCC *	µkat/l	8.69	6.95 - 10.4	U/l	521	417 - 625
Creatine Kinase-MB	NAC activated, immunoinhibition *	µkat/l	0.77	0.62 - 0.93	U/l	46.3	37.0 - 55.5
Creatinine	Jaffé kinetic	µmol/l	466	363 - 568	mg/dl	5.27	4.11 - 6.43
gamma-GT	γ-Glutamyl-4-nitroanilide *	µkat/l	2.57	2.00 - 3.13	U/l	154	120 - 188
Glucose	Hexokinase /G6P-DH	mmol/l	12.2	10.2 - 14.1	mg/dl	219	184 - 254
GOT (ASAT)	IFCC *	µkat/l	2.23	1.72 - 2.75	U/l	134	103 - 165
GPT (ALAT)	IFCC *	µkat/l	2.12	1.63 - 2.60	U/l	127	97.8 - 156
Haptoglobulin	Turbidimetric	g/l	1.34	1.03 - 1.65	mg/dl	134	103 - 165
HDL-Cholesterol	Direct enzymatic test	mmol/l	2.11	1.69 - 2.53	mg/dl	81.5	65.2 - 97.8
Immunoglobulin A (IgA)	Turbidimetric	g/l	2.03	1.62 - 2.44	mg/dl	203	162 - 244
Immunoglobulin G (IgG)	Turbidimetric	g/l	9.67	7.74 - 11.6	mg/dl	967	774 - 1,160
Immunoglobulin M (IgM)	Turbidimetric	g/l	0.87	0.70 - 1.04	mg/dl	87.0	69.6 - 104
Iron	Ferrozine	µmol/l	24.2	20.8 - 27.5	µg/dl	135	116 - 154
Lactate Dehydrogenase (LDH)	IFCC Lactate - Pyruvate *	µkat/l	5.55	4.55 - 6.55	U/l	333	273 - 393
LDL-Cholesterol	Direct enzymatic test	mmol/l	2.95	2.36 - 3.54	mg/dl	114	91.2 - 137
Lipase	Enzymatic colorimetric test *	µkat/l	1.12	0.89 - 1.34	U/l	67.0	53.6 - 80.4
Lipoprotein (a), Lp(a)	Turbidimetric	g/l	0.11	0.09 - 0.13	mg/dl	11.0	8.76 - 13.1
Lithium	Colorimetric	mmol/l	2.20	1.89 - 2.51	mval/l	2.20	1.89 - 2.51
Magnesium	Xylidyl blue	mmol/l	1.28	1.08 - 1.48	mg/dl	3.12	2.62 - 3.62
Phosphorus	Molybdate UV	mmol/l	2.75	2.26 - 3.25	mg/dl	8.52	6.98 - 10.0
Potassium	ISE (indirect)	mmol/l	6.31	5.68 - 6.94	mval/l	6.31	5.68 - 6.94
Protein total	Biuret	g/l	68.1	60.6 - 75.6	g/dl	6.81	6.06 - 7.56
Sodium	ISE (indirect)	mmol/l	153	138 - 168	mval/l	153	138 - 168
Triglycerides	GPO-PAP	mmol/l	2.66	2.18 - 3.13	mg/dl	233	191 - 275
Urea	Urease	mmol/l	8.66	6.75 - 10.6	mg/dl	52.0	40.6 - 63.4
Uric Acid	Enzymatic colorimetric test	µmol/l	638	549 - 728	mg/dl	10.7	9.23 - 12.2
Zinc	AAS	µmol/l	10.1	8.11 - 12.2	µg/dl	66.3	53.0 - 79.5

Protein Fractions				
Albumin	Electrophoresis with cellulose foil Ponceau S dye	%	61.80	49.44 - 74.16
α1-Globulin		%	3.81	2.67 - 4.95
α2-Globulin		%	10.08	8.06 - 12.10
β-Globulin		%	11.32	9.06 - 13.58
γ-Globulin		%	13.02	8.85 - 17.19