

	Method Methode Método Méthode * 37°C	SI Units SI Einheiten Unitades SI Unités SI	Target Sollwert Valor meta Valeur souhaitée	Range Bereich Rango Marge	Units Einheiten Unitades Unités	Target Sollwert Valor meta Valeur souhaitée	Range Bereich Rango Marge
<b>HUMAN</b>							
alpha-Amylase	2-chloro-4-nitrophenyl-maltotrioside (CNPG3) *	µkat/l	3.80	3.04 - 4.56	U/l	228	182 - 274
alpha-Amylase	IFCC-standardised *	µkat/l	1.49	1.19 - 1.78	U/l	89.3	71.4 - 107
Acid Phosphatase total	a-Naphtylphosphate *	µkat/l	0.09	0.06 - 0.11	U/l	5.11	3.42 - 6.80
Alanine Aminotransferase (ALAT, GPT)	IFCC mod. *	µkat/l	0.59	0.45 - 0.72	U/l	35.1	27.0 - 43.2
Albumin	CRM 470 standardised	g/l	34.3	26.4 - 42.2	g/dl	3.43	2.64 - 4.22
Alkaline Phosphatase	DGKC, DEA Buffer *	µkat/l	4.28	3.21 - 5.36	U/l	257	193 - 321
Alkaline Phosphatase	IFCC, AMP Buffer *	µkat/l	2.97	2.23 - 3.71	U/l	178	134 - 223
Aspartate Aminotransferase (ASAT, GOT)	IFCC mod. without pyridoxal phosphate *	µkat/l	0.58	0.45 - 0.72	U/l	35.0	27.0 - 43.1
auto-Bilirubin direct	DPD	µmol/l	27.2	20.1 - 34.3	mg/dl	1.59	1.18 - 2.00
auto-Bilirubin total	DPD	µmol/l	29.4	21.8 - 37.1	mg/dl	1.72	1.27 - 2.17
Bilirubin direct	Jendrassik-Gróf	µmol/l	24.3	18.0 - 30.6	mg/dl	1.42	1.05 - 1.79
Bilirubin total	Jendrassik-Gróf	µmol/l	28.0	20.8 - 35.3	mg/dl	1.64	1.21 - 2.07
Bilirubin total	2,4 - Dichloroaniline DCA	µmol/l	29.2	21.6 - 36.9	mg/dl	1.71	1.27 - 2.15
Calcium	o-Cresolphthalein complexone	mmol/l	2.06	1.84 - 2.29	mg/dl	8.25	7.34 - 9.16
Chloride	ISE (direct)	mmol/l	106	96.5 - 116	mg/dl	376	342 - 410
Chloride	TPTZ	mmol/l	105	95.6 - 114	mg/dl	372	339 - 406
Cholesterol total	CHOD-PAP	mmol/l	4.29	3.69 - 4.89	mg/dl	166	143 - 189
Cholinesterase	Butyrylthiocholine *	µkat/l	79.3	65.0 - 93.5	U/l	4756	3900 - 5612
Creatine Kinase CK NAC liquiUV	IFCC mod.*	µkat/l	2.28	1.83 - 2.74	U/l	137	110 - 164
Creatine Kinase CK NAC activated	DGKC optimised *	µkat/l	2.40	1.92 - 2.88	U/l	144	115 - 173
Creatinine	Enzymatic colorimetric test *	µmol/l	91.9	71.7 - 112	mg/dl	1.04	0.81 - 1.27
Creatinine	Jaffé, kinetic, without deproteinisation	µmol/l	103	80.0 - 125	mg/dl	1.16	0.90 - 1.42
auto-Creatinine	Jaffé, kinetic, without deproteinisation	µmol/l	98.1	76.5 - 120	mg/dl	1.11	0.87 - 1.35
gamma-Glutamyl Transferase (GGT)	IFCC *	µkat/l	0.58	0.45 - 0.70	U/l	34.6	27.0 - 42.2
Glucose liquiUV	Hexokinase /G6P-DH	mmol/l	5.32	4.47 - 6.17	mg/dl	95.9	80.6 - 111
Glucose liquicolor	GOD-PAP	mmol/l	5.28	4.44 - 6.13	mg/dl	95.2	80.0 - 110
HDL-Cholesterol	CHOD-PAP after precipitation	mmol/l	0.99	0.79 - 1.19	mg/dl	38.4	30.7 - 46.1
HDL-Cholesterol liquicolor	Direct enzymatic test	mmol/l	1.44	1.15 - 1.72	mg/dl	55.5	44.4 - 66.6
Iron	CAB	µmol/l	16.5	14.2 - 18.9	µg/dl	92.4	79.5 - 105
Iron	TPTZ	µmol/l	14.9	12.8 - 17.0	µg/dl	83.4	71.7 - 95.1
Lactate Dehydrogenase (LDH)	SCE mod. Pyruvate - Lactate *	µkat/l	6.72	5.51 - 7.93	U/l	403	330 - 476
LDL-Cholesterol	Direct enzymatic test	mmol/l	2.24	1.80 - 2.69	mg/dl	86.8	69.4 - 104
Lipase	Enzymatic colorimetric test *	µkat/l	0.70	0.56 - 0.84	U/l	42.1	33.7 - 50.5
Magnesium	Xylidyl blue	mmol/l	0.92	0.78 - 1.07	mg/dl	2.25	1.89 - 2.61
Pancreas Amylase	EPS-G7 *	µkat/l	1.10	0.88 - 1.31	U/l	65.7	52.6 - 78.8
Phosphorus	Phosphomolybdate	mmol/l	1.10	0.90 - 1.30	mg/dl	3.40	2.79 - 4.01
Potassium	ISE (direct)	mmol/l	4.35	3.92 - 4.79	mval/l	4.35	3.92 - 4.79
Potassium liquirapid	Tetraphenylboron	mmol/l	3.73	3.36 - 4.10	mval/l	3.73	3.36 - 4.10
Potassium liquiUV	Enzymatic UV test	mmol/l	4.44	3.77 - 5.11	mval/l	4.44	3.77 - 5.11
Protein total	Biuret	g/l	64.4	57.3 - 71.5	g/dl	6.44	5.73 - 7.15
Sodium	ISE (direct)	mmol/l	141	127 - 155	mval/l	141	127 - 155
Sodium liquicolor	Enzymatic colorimetric test	mmol/l	130	111 - 150	mval/l	130	111 - 150
Sodium rapid	Mg-uranylacetate	mmol/l	118	106 - 130	mval/l	118	106 - 130
TIBC Total Iron Binding Capacity	Aluminum oxide adsorption CAB	µmol/l	51.7	41.4 - 62.1	µg/dl	289	231 - 347
TIBC Total Iron Binding Capacity	Aluminum oxide adsorption TPTZ	µmol/l	48.3	38.7 - 58.0	µg/dl	270	216 - 324
Triglycerides	GPO-PAP	mmol/l	1.63	1.34 - 1.92	mg/dl	143	117 - 169

<b>Urea liquicolor</b>	mod. Berthelot reaction	mmol/l	5.34	4.17 - 6.52	mg/dl	32.1	25.0 - 39.2
<b>Urea liquiUV</b>	Urease/GLDH	mmol/l	5.61	4.38 - 6.85	mg/dl	33.7	26.3 - 41.1
<b>Uric Acid</b>	Uricase-PAP	µmol/l	279	240 - 318	mg/dl	4.69	4.03 - 5.35
<b>Uric Acid liquicolor plus</b>	Uricase-PAP	µmol/l	277	238 - 315	mg/dl	4.65	4.00 - 5.30
<b>Other Manufacturers</b>							
<b>alpha-Amylase</b>	EPS-G7, IFCC *	µkat/l	1.40	1.12 - 1.68	U/l	83.8	67.0 - 101
<b>Acid Phosphatase</b>	IFCC *	µkat/l	0.14	0.11 - 0.17	U/l	8.40	6.47 - 10.3
<b>Alanine Aminotransferase (ALAT, GPT)</b>	IFCC *	µkat/l	0.51	0.39 - 0.63	U/l	30.7	23.6 - 37.8
<b>Albumin</b>	Bromocresol Green CRM standardised	g/l	32.9	25.3 - 40.5	g/dl	3.29	2.53 - 4.05
<b>Alkaline Phosphatase</b>	IFCC *	µkat/l	2.75	2.06 - 3.44	U/l	165	124 - 206
<b>Aspartate Aminotransferase (AST, GOT)</b>	IFCC *	µkat/l	0.50	0.39 - 0.62	U/l	30.0	23.1 - 36.9
<b>Bilirubin direct</b>	Jendrassik-Gróf	µmol/l	23.9	17.7 - 30.2	mg/dl	1.40	1.04 - 1.76
<b>Bilirubin total</b>	Jendrassik-Gróf	µmol/l	29.6	21.9 - 37.3	mg/dl	1.73	1.28 - 2.18
<b>Calcium</b>	o-Cresolphthalein	mmol/l	2.08	1.85 - 2.31	mg/dl	8.32	7.40 - 9.24
<b>Chloride</b>	ISE	mmol/l	97.4	88.6 - 106	mg/dl	345	314 - 376
<b>Cholesterol total</b>	CHOD-PAP	mmol/l	4.21	3.62 - 4.80	mg/dl	163	140 - 186
<b>Copper</b>	AAS	µmol/l	12.4	9.95 - 14.9	µg/dl	79.0	63.2 - 94.8
<b>Creatine Kinase</b>	NAC activated, IFCC *	µkat/l	2.27	1.82 - 2.73	U/l	136	109 - 164
<b>Creatinine</b>	Jaffé kinetic	µmol/l	89.3	69.6 - 109	mg/dl	1.01	0.79 - 1.23
<b>gamma-Glutamyl Transferase (GGT)</b>	γ-Glutamyl-4-nitroanilide *	µkat/l	0.53	0.42 - 0.65	U/l	32.0	25.0 - 39.0
<b>Glucose</b>	Hexokinase /G6P-DH	mmol/l	5.13	4.31 - 5.96	mg/dl	92.5	77.7 - 107
<b>HDL-Cholesterol</b>	Direct enzymatic test	mmol/l	1.41	1.13 - 1.69	mg/dl	54.6	43.7 - 65.5
<b>Iron</b>	Ferrozine	µmol/l	14.2	12.2 - 16.2	µg/dl	79.5	68.4 - 90.6
<b>Lactate Dehydrogenase (LDH)</b>	IFCC Lactate - Pyruvate *	µkat/l	3.18	2.61 - 3.76	U/l	191	157 - 225
<b>LDL-Cholesterol</b>	Direct enzymatic test	mmol/l	2.12	1.70 - 2.55	mg/dl	82.1	65.6 - 98.5
<b>Lipase</b>	Enzymatic colorimetric test *	µkat/l	0.68	0.54 - 0.81	U/l	40.6	32.5 - 48.7
<b>Lithium</b>	ISE	mmol/l	0.88	0.76 - 1.00	mval/l	0.88	0.76 - 1.00
<b>Magnesium</b>	Xylidyl blue	mmol/l	0.87	0.73 - 1.01	mg/dl	2.12	1.78 - 2.46
<b>Pancreas Amylase</b>	EPS *	µkat/l	1.07	0.85 - 1.28	U/l	64.0	51.2 - 76.8
<b>Phosphorus</b>	Molybdate UV	mmol/l	1.06	0.87 - 1.25	mg/dl	3.28	2.69 - 3.87
<b>Potassium</b>	ISE (indirect)	mmol/l	4.04	3.68 - 4.40	mval/l	4.04	3.68 - 4.40
<b>Protein total</b>	Biuret	g/l	50.1	44.6 - 55.6	g/dl	5.01	4.46 - 5.56
<b>Sodium</b>	ISE (indirect)	mmol/l	129	121 - 137	mval/l	129	121 - 137
<b>Triglycerides</b>	GPO-PAP	mmol/l	1.59	1.31 - 1.88	mg/dl	140	115 - 165
<b>Urea</b>	Urease	mmol/l	5.11	3.99 - 6.24	mg/dl	30.7	23.9 - 37.5
<b>Uric Acid</b>	Enzymatic colorimetric test	µmol/l	271	233 - 309	mg/dl	4.56	3.92 - 5.20
<b>Zinc</b>	AAS	µmol/l	0.81	0.65 - 0.97	µg/dl	5.30	4.24 - 6.36

	Units Einheiten Unitades Unités	Target Sollwert Valor meta Valeur souhaitée	Range Bereich Rango Marge
<b>Human Turbidimetry</b>			
<b>Apolipoprotein A1</b>	mg/dl	116	92.8 - 139
<b>Apolipoprotein B</b>	mg/dl	70.0	56.0 - 84.0
<b>IgA direct</b>	mg/dl	157	119 - 195
<b>IgG direct</b>	mg/dl	741	593 - 889
<b>IgM direct</b>	mg/dl	59.3	42.7 - 75.9
<b>Lipoprotein (a)</b>	mg/dl	12.5	10.0 - 15.0

<b>Roche Diagnostics Turbidimetry</b>			
<b>Apolipoprotein A1</b>	mg/dl	113	90.4 - 136
<b>Apolipoprotein B</b>	mg/dl	66.0	52.8 - 79.2
<b>IgA</b>	mg/dl	160	122 - 198
<b>IgG</b>	mg/dl	721	577 - 865
<b>IgM</b>	mg/dl	64.0	46.1 - 81.9
<b>Lipoprotein(a)</b>	mg/dl	12.4	9.92 - 14.9

<b>Beckman Coulter Turbidimetry</b>			
<b>Apolipoprotein A1</b>	mg/dl	107	85.6 - 128
<b>Apolipoprotein B</b>	mg/dl	60.0	48.0 - 72.0
<b>Haptoglobin</b>	mg/dl	102	78.5 - 125
<b>IgA</b>	mg/dl	169	128 - 210
<b>IgG</b>	mg/dl	764	611 - 917
<b>IgM</b>	mg/dl	59.0	42.5 - 75.5
<b>Lipoprotein(a)</b>	mg/dl	11.0	8.80 - 13.2

<b>Protein Fractions</b>			
<b>Electrophoresis with cellulose foil Ponceau S dye</b>			
Albumin	%	61.0	48.8 - 73.2
$\alpha$ 1-Globulin	%	4.10	2.87 - 5.33
$\alpha$ 2-Globulin	%	9.90	7.92 - 11.9
$\beta$ -Globulin	%	7.50	6.00 - 9.00
$\gamma$ -Globulin	%	13.8	9.38 - 18.2