

**Target Values / Sollwerte / Valores Asignados/ Valeurs Cibles**
<https://www.human.de/target-value-sheets/>

Reagent name @ Method Reagenzbezeichnung @ Methode Nombre del reactivo @ Método Nom du réactif @ Méthode	applicable for anwendbar für aplicable para applicable pour	SI Unit SI Einheit Unidad SI Unité SI	Mean Mittelwert Media Moyenne	Range Bereich Rango Plage de valeurs	Unit Einheit Unidad Unité	Mean Mittelwert Media Moyenne	Range Bereich Rango Plage de valeurs
<b>HUMAN reagent kits</b>							
<b>ACID PHOSPHATASE</b> a-Naphthylphosphate, Hillmann mod., 37°C	HumaLyzor photometer, HumaStar analyzer	µkat/l	0.073	0.034 - 0.11	U/l	4.40	2.02 - 6.78
<b>ALBUMIN Iquicolor</b> Bromocresol green	HumaLyzor photometer	g/l	27.3	25.2 - 29.4	g/dl	2.73	2.52 - 2.94
	HumaStar analyzer	g/l	28.5	23.9 - 33.1	g/dl	2.85	2.39 - 3.31
<b>ALKALINE PHOSPHATASE Iquicolor</b> AMP buffer, 37°C, IFCC	HumaLyzor photometer	µkat/l	1.78	1.52 - 2.05	U/l	107	90.9 - 123
	HumaStar analyzer	µkat/l	1.77	1.50 - 2.12	U/l	106	89.9 - 127
<b>ALKALINE PHOSPHATASE opt. Iquicolor</b> DEA buffer, 37°C, GSCC/DGKC	HumaLyzor photometer w/o HL4000	µkat/l	2.28	2.03 - 2.52	U/l	137	122 - 151
	HumaLyzor 4000	µkat/l	2.00	1.73 - 2.27	U/l	120	104 - 136
	HumaStar analyzer	µkat/l	1.95	1.73 - 2.17	U/l	117	104 - 130
<b>alpha-AMYLASE Iquicolor</b> CNPG3, 37°C, IFCC	HumaLyzor photometer	µkat/l	1.78	1.53 - 2.02	U/l	107	92.0 - 121
	HumaStar analyzer	µkat/l	1.83	1.67 - 1.98	U/l	110	100 - 119
<b>auto-BILIRUBIN-D Iquicolor</b> DPD	HumaLyzor photometer	µmol/l	14.4	9.58 - 19.0	mg/dl	0.84	0.56 - 1.11
	HumaStar analyzer	µmol/l	14.0	10.9 - 16.9	mg/dl	0.82	0.64 - 0.99
<b>auto-BILIRUBIN-T Iquicolor</b> DPD	HumaLyzor photometer	µmol/l	21.5	15.6 - 27.4	mg/dl	1.26	0.91 - 1.60
	HumaStar analyzer w/o HS600	µmol/l	19.3	13.7 - 25.0	mg/dl	1.13	0.80 - 1.46
	HumaStar 600	µmol/l	16.6	14.7 - 18.5	mg/dl	0.97	0.86 - 1.08
<b>BILIRUBIN Iquicolor</b> DCA	HumaLyzor photometer	µmol/l	14.5	12.1 - 16.9	mg/dl	0.85	0.71 - 0.99
<b>BILIRUBIN DIRECT/TOTAL Iquicolor</b> Determination of Bilirubin direct Jendrassik-Gróf	HumaLyzor photometer	µmol/l	12.8	7.18 - 18.3	mg/dl	0.75	0.42 - 1.07
<b>BILIRUBIN DIRECT/TOTAL Iquicolor</b> Determination of Bilirubin total Jendrassik-Gróf	HumaLyzor photometer w/o HL4000	µmol/l	18.3	15.9 - 20.7	mg/dl	1.07	0.93 - 1.21
	HumaLyzor 4000	µmol/l	18.8	12.8 - 24.6	mg/dl	1.10	0.75 - 1.44
<b>CALCIUM Iquicolor</b> Ortho-cresolphthalein	HumaLyzor photometer	mmol/l	2.24	2.07 - 2.40	mg/dl	8.94	8.29 - 9.59
	HumaStar analyzer	mmol/l	2.23	2.05 - 2.41	mg/dl	8.93	8.21 - 9.64
<b>Chloride</b> ISE direct	HumaStar 600, HumaLyte	mmol/l	97.9	91.1 - 105	mg/dl	347	323 - 372
<b>CHLORIDE Iquicolor</b> TPTZ	HumaLyzor Primus	mmol/l	102	88.4 - 115	mg/dl	362	313 - 408
	HumaLyzor 4000	mmol/l	115	95.7 - 133	mg/dl	408	339 - 471
	HumaStar analyzer	mmol/l	99.0	87.8 - 111	mg/dl	351	311 - 393
<b>CHOLESTEROL Iquicolor</b> CHOD PAP	HumaLyzor photometer	mmol/l	3.93	3.57 - 4.27	mg/dl	152	138 - 165
	HumaStar analyzer	mmol/l	4.01	3.52 - 4.47	mg/dl	155	136 - 173
<b>CK NAC activated</b> Enzymatic, 37°C	HumaLyzor photometer	µkat/l	2.35	1.43 - 3.28	U/l	141	85.5 - 197
<b>CK NAC IquIUV</b> Enzymatic, 37°C, IFCC	HumaLyzor photometer	µkat/l	2.48	2.03 - 2.93	U/l	149	122 - 176
	HumaStar analyzer	µkat/l	2.73	1.70 - 3.75	U/l	164	102 - 225
<b>auto-CREATININE Iquicolor</b> Jaffé	HumaLyzor photometer	µmol/l	69.0	61.0 - 76.9	mg/dl	0.78	0.69 - 0.87
	HumaStar analyzer	µmol/l	84.9	74.3 - 95.5	mg/dl	0.96	0.84 - 1.08
<b>CREATININE Iquicolor</b> Jaffé	HumaLyzor photometer	µmol/l	79.6	69.8 - 89.3	mg/dl	0.90	0.79 - 1.01
<b>CREATININE (enzym) Iquicolor</b> Enzymatic	HumaLyzor photometer	µmol/l	76.9	62.8 - 91.1	mg/dl	0.87	0.71 - 1.03
	HumaStar analyzer	µmol/l	70.7	54.8 - 86.6	mg/dl	0.80	0.62 - 0.98
<b>gamma-GT Iquicolor</b> Gamma-Glutamyl-3-carboxy-4-nitroanilide, 37°C, IFCC	HumaLyzor photometer	µkat/l	1.02	0.839 - 1.20	U/l	61.1	50.3 - 71.9
	HumaStar analyzer	µkat/l	1.11	0.945 - 1.28	U/l	66.8	56.7 - 76.9
<b>GLUCOSE Iquicolor</b> GOD	HumaLyzor photometer	mmol/l	5.22	3.79 - 6.66	mg/dl	94.0	68.2 - 120
	HumaStar analyzer	mmol/l	5.83	4.94 - 6.72	mg/dl	105	89.0 - 121
<b>GLUCOSE IquIUV<sup>mono</sup></b> Hexokinase	HumaLyzor photometer	mmol/l	5.88	4.38 - 7.38	mg/dl	106	79.0 - 133
	HumaStar analyzer	mmol/l	5.34	4.70 - 5.99	mg/dl	96.3	84.7 - 108
<b>GOT (ASAT) IFCC mod. IquIUV</b> Enzymatic, 37°C, IFCC without P5P	HumaLyzor photometer	µkat/l	0.458	0.317 - 0.600	U/l	27.5	19.0 - 36.0
	HumaStar analyzer	µkat/l	0.458	0.317 - 0.600	U/l	27.5	19.0 - 36.0
<b>GPT (ALAT) IFCC mod. IquIUV</b> Enzymatic, 37°C, IFCC without P5P	HumaLyzor photometer	µkat/l	0.510	0.455 - 0.565	U/l	30.6	27.3 - 33.9
	HumaStar analyzer	µkat/l	0.515	0.412 - 0.620	U/l	30.9	24.7 - 37.2
<b>HDL CHOLESTEROL</b> Precipitation method	HumaLyzor photometer	mmol/l	2.24	1.93 - 2.54	mg/dl	86.6	74.8 - 98.4
<b>IRON Iquicolor</b> CAB	HumaLyzor photometer	µmol/l	20.4	14.4 - 26.5	µg/dl	114	80.3 - 148
	HumaStar analyzer	µmol/l	24.7	18.4 - 31.1	µg/dl	138	103 - 174

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<b>IRON TPTZ Iquicolor</b> TPTZ	HumaLyzer photometer	µmol/l	23.3	20.4 - 26.1	µg/dl	130	114 - 146
	HumaStar analyzer	µmol/l	23.7	21.0 - 26.3	µg/dl	132	117 - 147
<b>LDH SCE mod. IquiuV</b> Substrate Pyruvate, 37°C	HumaLyzer photometer	µkat/l	6.47	4.50 - 8.44	U/l	388	270 - 506
	HumaStar analyzer	µkat/l	5.12	4.28 - 5.95	U/l	307	257 - 357
<b>MAGNESIUM Iquicolor</b> Xylidyl blue	HumaLyzer photometer	mmol/l	0.819	0.695 - 0.942	mg/dl	1.99	1.69 - 2.29
	HumaStar analyzer	mmol/l	0.769	0.671 - 0.868	mg/dl	1.87	1.63 - 2.11
<b>PANCREAS-AMYLASE Iquicolor</b> EPS-G7, 37°C	HumaLyzer photometer	µkat/l	1.27	1.09 - 1.45	U/l	76.0	65.3 - 86.7
	HumaStar analyzer	µkat/l	1.32	1.15 - 1.50	U/l	79.4	69.0 - 89.8
<b>PHOSPHORUS Iquirapid</b> Molybdate (UV)	HumaLyzer photometer	mmol/l	1.59	1.27 - 1.91	mg/dl	4.93	3.93 - 5.92
	HumaStar analyzer	mmol/l	1.34	1.17 - 1.50	mg/dl	4.14	3.62 - 4.65
<b>Potassium</b> ISE direct	HumaStar 600, Humalyte	mmol/l	4.79	4.32 - 5.26	mval/l	4.79	4.32 - 5.26
<b>POTASSIUM Iquirapid</b> Precipitation method	HumaLyzer photometer	mmol/l	4.30	3.16 - 5.44	mval/l	4.30	3.16 - 5.44
<b>POTASSIUM IquiuV</b> Enzymatic	HumaLyzer photometer	mmol/l	4.21	3.80 - 4.62	mval/l	4.21	3.80 - 4.62
	HumaStar analyzer	mmol/l	4.24	3.84 - 4.64	mval/l	4.24	3.84 - 4.64
<b>Sodium</b> ISE direct	HumaStar 600	mmol/l	112	110 - 114	mval/l	112	110 - 114
	Humalyte	mmol/l	121	114 - 127	mval/l	121	114 - 127
<b>SODIUM Iquicolor</b> Enzymatic	HumaLyzer photometer	mmol/l	96.4	82.4 - 110	mval/l	96.4	82.4 - 110
	HumaStar analyzer	mmol/l	104	89.3 - 118	mval/l	104	89.3 - 118
<b>SODIUM RAPID</b> Precipitation method	HumaLyzer photometer	mmol/l	95.7	78.3 - 113	mval/l	95.7	78.3 - 113
<b>TIBC</b> Fe saturation Fe determination using IRON Iquicolor	HumaStar analyzer	µmol/l	68.4	60.9 - 75.9	µg/dl	382	340 - 424
<b>TIBC</b> Fe saturation Fe determination using IRON TPTZ Iquicolor	HumaStar analyzer	µmol/l	77.3	63.2 - 91.6	µg/dl	432	353 - 512
<b>TOTAL PROTEIN Iquicolor</b> Biuret	HumaLyzer photometer	g/l	61.7	57.6 - 65.8	g/dl	6.17	5.76 - 6.58
	HumaStar analyzer	g/l	66.4	63.2 - 69.6	g/dl	6.64	6.32 - 6.96
<b>TRIGLYCERIDES Iquicolor<sup>mono</sup></b> GPO POD	HumaLyzer photometer	mmol/l	1.09	0.83 - 1.35	mg/dl	95.3	72.8 - 118
	HumaStar analyzer	mmol/l	1.07	0.897 - 1.24	mg/dl	94.0	78.7 - 109
<b>UREA Iquicolor</b> Berthelot mod.	HumaLyzer photometer	mmol/l	4.86	3.95 - 5.78	mg/dl	29.2	23.7 - 34.7
<b>UREA IquiuV</b> Urease	HumaLyzer photometer	mmol/l	4.76	3.95 - 5.59	mg/dl	28.6	23.7 - 33.6
	HumaStar analyzer	mmol/l	4.71	3.86 - 5.54	mg/dl	28.3	23.2 - 33.3
<b>URIC ACID Iquicolor<sup>plus</sup></b> Uricase with ascorbate oxidase	HumaLyzer photometer w/o HL4000	µmol/l	338	303 - 372	mg/dl	5.68	5.10 - 6.26
	HumaLyzer 4000	µmol/l	285	229 - 341	mg/dl	4.79	3.85 - 5.73
	HumaStar analyzer	µmol/l	293	261 - 325	mg/dl	4.92	4.38 - 5.46
<b>URIC ACID Iquicolor</b> Uricase	HumaLyzer photometer	µmol/l	334	278 - 389	mg/dl	5.61	4.68 - 6.54
	HumaStar analyzer	µmol/l	333	239 - 427	mg/dl	5.60	4.01 - 7.18