

Target Values / Sollwerte / Valores Asignados/ Valeurs Cibles

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

Reagent name / Reagenzbezeichnung / Parámetro / Paramètre / Method / Methode / Método/ Méthode	applicable for / anwendbar für / aplicable por / 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	HumaStar analyzer, HumaLyzer photometer	µkat/l	0,275	0,242 - 0,309	U/l	16,5	14,5 - 18,5
<b>ALBUMIN liquicolor</b> Bromocresol green	HumaStar analyzer	g/l	54,3	49,4 - 59,1	g/dl	5,43	4,94 - 5,91
	Humalyzer photometer	g/l	50,2	45,1 - 55,2	g/dl	5,02	4,51 - 5,52
<b>ALKALINE PHOSPHATASE liquicolor</b> AMP buffer, 37°C, IFCC	HumaStar analyzer	µkat/l	4,82	4,28 - 5,33	U/l	289	257 - 320
	Humalyzer photometer	µkat/l	4,68	4,15 - 5,22	U/l	281	249 - 313
<b>ALKALINE PHOSPHATASE opt. liquicolor</b> DEA Buffer, 37°C, GSCC/DGKC	HumaStar analyzer	µkat/l	5,83	5,05 - 6,63	U/l	350	303 - 398
	Humalyzer photometer	µkat/l	6,85	5,83 - 7,87	U/l	411	350 - 472
	Humalyzer 4000, Setting 004H	µkat/l	5,70	5,00 - 6,40	U/l	342	300 - 384
<b>alpha-AMYLASE liquicolor</b> CNP3, 37°C, IFCC	Humalyzer photometer	µkat/l	4,53	4,07 - 5,02	U/l	272	244 - 301
	HumaStar analyzer	µkat/l	4,70	4,25 - 5,13	U/l	282	255 - 308
<b>APOLIPOPROTEIN A1</b> Immunturbidimetry	HumaStar analyzer	g/l	1,65	1,25 - 2,06	mg/dl	165	125 - 206
	Humalyzer photometer	g/l	1,95	1,74 - 2,16	mg/dl	195	174 - 216
<b>APOLIPOPROTEIN B</b> Immunturbidimetry	HumaStar analyzer, HumaLyzer photometer	g/l	1,35	0,95 - 1,74	mg/dl	135	95,3 - 174
<b>auto-BILIRUBIN-D liquicolor</b> DPD method	HumaStar analyzer	µmol/l	40,7	38,8 - 42,6	mg/dl	2,38	2,27 - 2,49
	Humalyzer 4000	µmol/l	40,2	26,7 - 53,5	mg/dl	2,35	1,56 - 3,13
<b>auto-BILIRUBIN-T liquicolor</b> DPD method	Humalyzer photometer 4000	µmol/l	66,0	61,4 - 70,6	mg/dl	3,86	3,59 - 4,13
	HumaStar analyzer	µmol/l	68,4	63,3 - 73,4	mg/dl	4,00	3,70 - 4,29
<b>BILIRUBIN liquicolor</b> DCA method	Humalyzer photometer	µmol/l	62,3	50,8 - 73,7	mg/dl	3,64	2,97 - 4,31
<b>BILIRUBIN DIRECT/TOTAL liquicolor</b> Determination of Bilirubin total Jendrassik-Gróf	Humalyzer photometer w/o HumaLyzer 4000	µmol/l	65,3	55,2 - 75,4	mg/dl	3,82	3,23 - 4,41
	Humalyzer 4000	µmol/l	60,5	54,0 - 67,0	mg/dl	3,54	3,16 - 3,92
<b>BILIRUBIN DIRECT/TOTAL liquicolor</b> Determination of Bilirubin direct Jendrassik-Gróf	Humalyzer photometer	µmol/l	43,3	34,0 - 52,3	mg/dl	2,53	1,99 - 3,06
<b>CALCIUM liquicolor</b> Ortho-cresolphthalein	HumaStar analyzer	mmol/l	3,03	2,85 - 3,23	mg/dl	12,1	11,4 - 12,9
	Humalyzer photometer	mmol/l	3,10	2,95 - 3,23	mg/dl	12,4	11,8 - 12,9
<b>Chloride</b> ISE direct	HumaStar 600, HumaLyte	mmol/l	116	107 - 124	mg/dl	411	379 - 440
<b>CHLORIDE liquicolor</b> TPTZ method	HumaStar analyzer	mmol/l	119	108 - 129	mg/dl	422	383 - 457
	Humalyzer photometer Primus only	mmol/l	121	105 - 137	mg/dl	429	372 - 486
	Humalyzer photometer 4000 only	mmol/l	131	116 - 146	mg/dl	464	411 - 518
<b>CHOLESTEROL liquicolor</b> CHOD-PAP	HumaStar analyzer	mmol/l	8,12	7,47 - 8,77	mg/dl	314	289 - 339
	Humalyzer photometer	mmol/l	7,86	7,45 - 8,25	mg/dl	304	288 - 319
<b>CHOLINESTERASE liquicolor</b> Butyrylthiocholine, 37°C, GSCC/DGKC	HumaStar analyzer	µkat/l	131	123 - 140	U/l	7880	7359 - 8400
	Humalyzer 4000	µkat/l	140	126 - 154	U/l	8400	7566 - 9234
<b>CK NAC activated</b> Enzymatic, 37°C	Humalyzer photometer	µkat/l	11,9	9,50 - 14,2	U/l	712	570 - 854
<b>CK NAC liquiUV</b> Enzymatic, 37°C, IFCC	HumaStar analyzer, Humalyzer 4000/Primus	µkat/l	12,7	8,75 - 16,5	U/l	759	525 - 992
	Humalyzer 2000/3000	µkat/l	10,8	8,50 - 13,1	U/l	649	510 - 788
<b>auto-CREATININE liquicolor</b> Jaffé	Humalyzer photometer	µmol/l	365	278 - 453	mg/dl	4,13	3,14 - 5,12
	HumaStar analyzer	µmol/l	454	416 - 491	mg/dl	5,13	4,71 - 5,55
<b>CREATININE liquicolor</b> Jaffé	Humalyzer photometer	µmol/l	419	371 - 466	mg/dl	4,74	4,20 - 5,27
<b>CREATININE (enzym) liquicolor</b> Enzymatic	HumaStar analyzer	µmol/l	455	430 - 481	mg/dl	5,15	4,86 - 5,44
	Humalyzer 4000	µmol/l	418	349 - 487	mg/dl	4,73	3,95 - 5,51
<b>gamma-GT liquicolor</b> Gamma-Glutamyl-3carboxy-4-nitroanilide, 37°C, IFCC	HumaStar analyzer	µkat/l	2,37	2,13 - 2,58	U/l	142	128 - 155
	Humalyzer photometer	µkat/l	2,05	1,72 - 2,37	U/l	123	103 - 142
<b>GLUCOSE liquicolor</b> GOD	HumaStar analyzer	mmol/l	11,0	10,3 - 11,7	mg/dl	198	185 - 211
	Humalyzer photometer	mmol/l	11,5	10,4 - 12,5	mg/dl	207	188 - 225
<b>GLUCOSE liquiUV<sup>mono</sup></b> Hexokinase	HumaStar analyzer	mmol/l	11,0	10,3 - 11,8	mg/dl	199	186 - 212
	Humalyzer photometer	mmol/l	12,4	10,8 - 14,0	mg/dl	223	194 - 252
<b>GOT (AST) IFCC mod. liquiUV</b> Enzymatic, 37°C, IFCC without P5P	HumaStar analyzer	µkat/l	2,05	1,92 - 2,18	U/l	123	115 - 131
	Humalyzer photometer	µkat/l	2,08	1,82 - 2,33	U/l	125	109 - 140
<b>GPT (ALT) IFCC mod. liquiUV</b> Enzymatic, 37°C, IFCC without P5P	HumaStar analyzer	µkat/l	1,98	1,77 - 2,20	U/l	119	106 - 132
	Humalyzer photometer	µkat/l	1,92	1,60 - 2,25	U/l	115	96,1 - 135
<b>HDL CHOLESTEROL liquicolor</b> Homogenous enzymatic assay	HumaStar analyzer, HumaLyzer photometer	mmol/l	2,50	1,81 - 3,21	mg/dl	96,8	69,8 - 124
<b>HDL CHOLESTEROL</b> Precipitation method	Humalyzer photometer	mmol/l	3,31	2,92 - 3,72	mg/dl	128	113 - 144
<b>IRON liquicolor</b> CAB	HumaStar analyzer	µmol/l	55,8	49,4 - 62,1	µg/dl	312	276 - 347
	Humalyzer photometer	µmol/l	46,2	33,5 - 58,9	µg/dl	258	187 - 329
<b>IRON TPTZ liquicolor</b> TPTZ	HumaStar analyzer	µmol/l	56,0	52,4 - 59,8	µg/dl	313	293 - 334
	Humalyzer photometer	µmol/l	51,7	45,3 - 58,2	µg/dl	289	253 - 325
<b>IMMUNOGLOBULINS direct IgA</b> Immunturbidimetry	HumaStar analyzer, HumaLyzer photometer	g/l	2,58	2,28 - 2,88	mg/dl	258	228 - 288
<b>IMMUNOGLOBULINS direct IgG</b> Immunturbidimetry	HumaStar analyzer, HumaLyzer photometer	g/l	12,3	9,83 - 14,8	mg/dl	1234	983 - 1484
<b>IMMUNOGLOBULINS direct IgM</b> Immunturbidimetry	HumaStar 600, Humalyzer 4000	g/l	0,856	0,782 - 0,930	mg/dl	85,6	78,2 - 93,0
	HumaStar 100/200/300SR, Humalyzer 2000/3000	g/l	1,16	0,897 - 1,43	mg/dl	116	89,7 - 143

<b>LDH SCE mod. liquiUV</b> Substrate Pyruvate, 37°C, SCE	HumaStar analyzer	µkat/l	9,50	8,54 - 10,5	U/l	570	512 - 628
	Humalyzer photometer	µkat/l	11,3	9,42 - 13,2	U/l	677	565 - 790
<b>LDL CHOLESTEROL liquicolor</b> Homogenous enzymatic assay	HumaStar analyzer, Humalyzer photometer	mmol/l	4,73	3,75 - 5,74	mg/dl	183	145 - 222
<b>LIPASE liquicolor</b> Substrate Methylresorufin, 37°C	LOT 21001 and higher	µkat/l	1,21	1,05 - 1,37	U/l	72,5	62,9 - 82,1
	up to LOT 20010	µkat/l	1,09	0,807 - 1,38	U/l	65,5	48,4 - 82,6
<b>MAGNESIUM liquicolor</b> Xylidyl blue	HumaStar analyzer	mmol/l	1,24	1,07 - 1,41	mg/dl	3,01	2,59 - 3,43
	Humalyzer photometer	mmol/l	1,34	1,21 - 1,47	mg/dl	3,25	2,93 - 3,57
<b>PANCREAS-AMYLASE liquicolor</b> EPS-G7, 37°C	HumaStar analyzer, Humalyzer photometer	µkat/l	2,57	2,35 - 2,77	U/l	154	141 - 166
<b>PHOSPHORUS liquirapid</b> Molybdate (UV)	HumaStar analyzer	mmol/l	2,30	2,11 - 2,49	mg/dl	7,12	6,54 - 7,70
	Humalyzer photometer	mmol/l	2,77	2,44 - 3,11	mg/dl	8,59	7,55 - 9,62
<b>Potassium</b> ISE direct	HumaStar 600, Humalyte	mmol/l	6,30	5,91 - 6,69	mval/l	6,30	5,91 - 6,69
<b>POTASSIUM liquirapid</b> Precipitation method	Humalyzer photometer	mmol/l	6,01	4,89 - 7,12	mval/l	6,01	4,89 - 7,12
<b>POTASSIUM liquiUV</b> Enzymatic	HumaStar analyzer	mmol/l	5,66	5,19 - 6,13	mval/l	5,66	5,19 - 6,13
	Humalyzer photometer	mmol/l	5,58	5,10 - 6,06	mval/l	5,58	5,10 - 6,06
<b>Sodium</b> ISE direct	HumaStar 600, Humalyte	mmol/l	160	155 - 165	mval/l	160	155 - 165
<b>SODIUM liquicolor</b> Enzymatic	HumaStar analyzer, Humalyzer photometer	mmol/l	151	131 - 171	mval/l	151	131 - 171
<b>SODIUM RAPID</b> Precipitation method	Humalyzer photometer	mmol/l	134	106 - 161	mval/l	134	106 - 161
<b>TIBC</b> Fe saturation Fe determination using IRON TPTZ liquicolor	HumaStar analyzer	µmol/l	105	87,0 - 123	µg/dl	588	486 - 689
<b>TIBC</b> Fe saturation Fe determination using IRON liquicolor	HumaStar analyzer	µmol/l	94,0	79,8 - 108	µg/dl	525	446 - 604
<b>TOTAL PROTEIN liquicolor</b> Biuret	HumaStar analyzer	g/l	97,4	87,1 - 108	g/dl	9,74	8,71 - 10,8
	Humalyzer photometer	g/l	93,9	85,3 - 102	g/dl	9,39	8,53 - 10,2
<b>TRIGLYCERIDES liquicolor<sup>mono</sup></b> GPO POD	Humalyzer photometer	mmol/l	2,68	2,29 - 3,07	mg/dl	235	201 - 269
	HumaStar analyzer	mmol/l	2,74	2,51 - 2,98	mg/dl	240	220 - 261
<b>UREA liquicolor</b>	Humalyzer photometer	mmol/l	23,6	20,0 - 27,3	mg/dl	142	120 - 164
<b>UREA liquiUV</b> Urease (UV)	Humalyzer photometer	mmol/l	23,8	22,1 - 25,6	mg/dl	143	133 - 154
	HumaStar analyzer	mmol/l	24,0	22,5 - 25,3	mg/dl	144	135 - 152
<b>URIC ACID liquicolor<sup>plus</sup></b> Uricase	Humalyzer photometer	µmol/l	636	520 - 755	mg/dl	10,7	8,74 - 12,7
	HumaStar analyzer	µmol/l	607	556 - 660	mg/dl	10,2	9,35 - 11,1
<b>URIC ACID liquicolor</b> Uricase	HumaStar analyzer	µmol/l	613	504 - 720	mg/dl	10,3	8,47 - 12,1
	Humalyzer photometer	µmol/l	613	544 - 678	mg/dl	10,3	9,14 - 11,4

CS-SP

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