

REF	Content tests	Test code	Method	Units	R = ready to use P = reconst. Chimney	Calibrator	Calibration points	Calibration type	on board Stability (days)	Calibration stability (days)	Measuring range	Sample Type*	Required solutions	HumaTrol N/P SERODOS / SERODOSplus TURBIDOS	Other controls	Reference ranges (adults) m = male f = female	
ACID PHOSPHATASE																	
10660600	3 x 50	ACP	a-Naphtyl phosphate, Hillmann mod.	U/l; µkat/l	P	AUTOCAL	1	Linear	7	7	2.4 - 50 U/l	S	DIL	X X -		m: <6.6 U/l; <0.11 µkat/l f: <6.5 U/l; <0.11 µkat/l	
ALBUMIN liquicolor																	
10560300	4 x 60	ALB	Bromcresol green	g/dl; g/l	R	AUTOCAL	1	Linear	56 56	35 35	0.5 - 8.0 g/dl; 5 - 80 g/l	S; EDTA; HEP	DIL	X X -		≤60 years: 3.5-5.3 g/dl; 35-53 g/l	
10560600	6 x 150																
ALKALINE PHOSPHATASE liquicolor																	
12117300	2 x 150	ALP	AMP buffer, 37°C, IFCC	U/l; µkat/l	R	R1	AUTOCAL	1	Linear	28 28	20 20	10 - 2000 U/l; 0.17 - 33.3 µkat/l	S; HEP	DIL	X X -		m: 40 - 130 U/l; 0.67 - 2.17 µkat/l f: 44 - 105 U/l; 0.92 - 1.75 µkat/l
12117600	3 x 250																
ALKALINE PHOSPHATASE opt. liquicolor																	
12027300	2 x 150	ALP-2	DEA buffer, 37°C, GSCC/DGKC	U/l; µkat/l	R	R1	AUTOCAL	1	Linear	28 28	28 28	10 - 2000 U/l; 0.17 - 33.3 µkat/l	S; HEP	DIL	X X -		m: 80 - 306 U/l; 1.33 - 5.10 µkat/l f: 64 - 306 U/l; 1.07 - 5.10 µkat/l
12027600	3 x 250																
alpha-AMYLASE liquicolor																	
12028300	2 x 100	AMY	CNPG3, 37°C, IFCC	U/l; µkat/l	R	AUTOCAL	1	Linear	56 56	56 56	10 - 4500 U/l; 0.17 - 75 µkat/l	S; HEP	DIL	X X -		≤220 U/l; ≤3.67 µkat/l	
12028600	3 x 260																
anti-STREPTOLYSIN O																	
11251300	1 x 100	ASO	Immunoturbidimetry, Latex-enhanced	IU/ml; kIU/l	R ⁴⁾	R1	ASO Standard	1	Linear	49 49	28 28	10 - 500 IU/ml; 10 - 500 kIU/l	S	DIL, SWA-2	- - X		≤200 IU/ml; ≤200kIU/l
11251600	1 x 210																
auto-BILIRUBIN-D liquicolor																	
10741300	2 x 100	DBIL	DPD method	mg/dl; µmol/l	R	AUTOCAL	1	Linear	28 28	28 28	0.1 - 9.0 mg/dl; 1.71 - 154 µmol/l	S; HEP	DIL	X X -		<0.2 mg/dl; <3.42 µmol/l	
10741600	5 x 210																
auto-BILIRUBIN-T liquicolor																	
10742300	2 x 150	TBIL	DPD method	mg/dl; µmol/l	R	AUTOCAL	1	Linear	56 56	30 30	0.20 - 20 mg/dl; 3.42 - 342 µmol/l	S; HEP	DIL	X X -		0.1 - 1.2 mg/dl; 2 - 21 µmol/l	
10742300	5 x 210																

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auto-CREATININE liquicolor																
10052300	2 x 150	CREA	Jaffé	mg/dl; µmol/l	R	R1	AUTOCAL	1	Linear	21 21	7 7	0.10 - 25.0 mg/dl; 8.84 - 2210 µmol/l	S; HEP	DIL	X X -	m: 0.70 - 1.30 mg/dl; 62 - 115 µmol/l f: 0.58 - 1.12 mg/dl; 51 - 99 µmol/l
10052600	5 x 250															
CALCIUM liquicolor																
10011300	3 x 100	Ca	Ortho-cresolphthalein	mg/dl; mmol/l	R	R1	AUTOCAL	1	Linear	21 21	1 1	0.25 - 20 mg/dl; 0.06 - 5.00 mmol/l	S; HEP	DIL	X X -	8.6 - 10.3 mg/dl; 2.15 - 2.58 mmol/l
10011600	3 x 430															
CHOLESTEROL liquicolor																
10028300	2 x 100	CHOL	CHOD PAP	mg/dl; mmol/l	R		AUTOCAL	1	Linear	56 56	56 56	5 - 1100 mg/dl; 0.13 - 28.4 mmol/l	S; EDTA; HEP	DIL	X X -	≤190 mg/dl; ≤5.0 mmol/l
10028600	3 x 150															
CHOLINESTERASE liquicolor																
12007300	2 x 100	CHE	Butyrylthiocholine, 37°C, DGKC	U/l; kU/l; µkat/l	R		AUTOCAL	1	Linear	42	42	500 - 20000 U/l (0.5 - 20 kU/l); 8 - 333 µkat/l	S	DIL	X	m: 4620 - 11500 U/l; 77 - 195 µkat/l f: 3930 - 10800 U/l; 65 - 180 µkat/l
CK NAC liquiUV																
12015600	2 x 180	CK	Enzymatic, 37°C, IFCC	U/l; µkat/l	R		AUTOCAL	1	Linear	56	56	7 - 2000 U/l; 0.12 - 33.3 µkat/l	S; HEP	DIL	X X -	m: ≤ 190 U/l; ≤ 3.20 µkat/l f: ≤ 170 U/l; ≤ 2.85 µkat/l
CK-MB liquiUV																
12118600	2 x 100	CKMB	Immuno inhibition	U/l; µkat/l	R		CK-MB Calibrator	1	Linear	56	56	5 - 2000 U/l; 0.08 - 33.3 µkat/l	S; Li-HEP	DIL	- - - CK-MB Control	<24 U/l; <0.4 µkat/l
CHLORIDE liquicolor																
10115300	2 x 50	Cl	TPTZ method	mmol/l	R		AUTOCAL	1	Linear	35	14	7 - 500 mmol/l; 25 - 1773 mg/dl	S; HEP; CSF	DIL-2	X X -	Serum: 95 - 105 mmol/l; 337 - 383 mg/dl CSF: 116 - 127 mmol/l; 411 - 450 mg/dl
COMPLEMENT C3																
11110600	1 x 70	C3	Immunoturbidimetry	mg/dl; g/l	R	R1	C3/C4/TRF Stan- dard	6	Five pa- rameters	63	63	5 - 350 mg/dl 0.05 - 3.50 g/l	S	DIL, C-CLEAN	- - X	90 - 180 mg/dl; 0.9 - 1.8 g/l
COMPLEMENT C4																
11113600	1 x 70	C4	Immunoturbidimetry	mg/dl; g/l	R	R1	C3/C4/TRF Standard	6	Five pa- rameters	63	63	4 - 60 mg/dl 0.04 - 0.60 g/l	S	DIL, C-CLEAN	- - X	20 - 50 mg/dl; 0.2 - 0.5 g/l

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CREATININE (enzym) liquicolor																	
10053300	1 x 95	CREA-2	Enzymatic	mg/dl; µmol/l	R	AUTOCAL	1	Linear	56	56	0.15 – 40.0 mg/dl; 13.3 – 3536 µmol/l	S; HEP	DIL	X X –		m: 0.64 - 1.19 mg/dl; 57 - 105 µmol/l f: 0.40 - 1.00 mg/dl; 35 - 88 µmol/l	
10053600	1 x 275								56	56							
CRP																	
11241300	1 x 100	CRP	Immunoturbidimetry	mg/dl; mg/l	R	R2	CRP Standard	6	Poly-linear	49	49	0.3 - 16.0 mg/dl; 3.0 - 160 mg/l	S; EDTA; HEP	DIL, C-CLEAN	– – X		≤0.5 mg/dl; ≤5 mg/l
11241600	1 x 250								49	49							
gamma-GT liquicolor																	
12023300	2 x 100	GGT	gamma-Glutamyl- 3carboxy-4-nitroanili- de, 37°C, IFCC	U/l; µkat/l	R	AUTOCAL	1	Linear	56	56	4 - 1300 U/l; 0.07 - 21.7 µkat/l	S; EDTA; HEP	DIL	X X –		m: <60 U/l; <1.0 µkat/l f: <40 U/l; <0.65 µkat/l	
12023600	3 x 250								56	56							
GLUCOSE liquicolor																	
10260300	2 x 150	GLUC	GOD	mg/dl; mmol/l	R	AUTOCAL	1	Linear	56	56	2 - 500 mg/dl; 0.11 - 27.8 mmol/l	S; EDTA; HEP ¹⁾	DIL	X X –		60 - 95 mg/dl*; 3.3 - 5.3 mmol/l*	
10260600	6 x 210								56	56						*fasting	
GOT (ASAT) IFCC mod. liquiUV																	
12021300	2 x 200	GOT	Enzymatic, 37°C, IFCC without P5P	U/l; µkat/l	R	AUTOCAL	1	Linear	56	56	3 - 500 U/l; 0.05 - 8.33 µkat/l	S; EDTA; HEP	DIL	X X –		m: <35 U/l; <0.58 µkat/l f: <31 U/l; <0.52 µkat/l	
12021600	5 x 310								56	56							
GPT (ALAT) IFCC mod. liquiUV																	
12022300	2 x 200	GPT	Enzymatic, 37°C, IFCC without P5P	U/l; µkat/l	R	AUTOCAL	1	Linear	56	56	7.3 - 440 U/l; 0.12 - 7.33 µkat/l	S; EDTA; HEP	DIL	X X –		m: <45 U/l; <0.74 µkat/l f: <34 U/l; <0.56 µkat/l	
12022600	5 x 310								56	56							
HbA1c liquidirect																	
10770600	1 x 135	HbA1c	Immunologic assay	% HbA1c; mmol/mol Hb	R ³⁾	R1	HbA1c liquidirect Calibrator Set	5	Four parameters	28	14	15 - 140 mmol/ mol Hb ⁵⁾ ; 3.5 - 15% HbA1c ⁵⁾	whole blood (EDTA)	DIL, C-CLEAN	– – –	HbA1c li- quidirect Control Set	<6% HbA1c; <42 mmol/mol Hb
HDL CHOLESTEROL liquicolor																	
10084300	2 x 100	HDL-C	Homogenous enzymatic assay	mg/dl; mmol/l	R	AUTOCAL	1	Linear	21	14	5 - 150 mg/dl; 0.13 - 3.88 mmol/l	S; EDTA; HEP	DIL	– X –		>60 mg/dl; >1.54 mmol/l	
10084600	2 x 180								14	14							

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IMMUNOGLOBULINS direct IgA																	
11501300	1 x 100	IgA	Immunoturbidimetry	mg/dl; g/l	R	R2	Immunoglobulins direct Calibrator Set	6	Four parameters	42 42	42 42	5 - 600 mg/dl	S	DIL, C-CLEAN	- X X 0		70 - 500 mg/dl; 0.70 - 5.0 g/l
11501600	1 x 250																
IMMUNOGLOBULINS direct IgG																	
11502300	1 x 100	IgG	Immunoturbidimetry	mg/dl; g/l	R	R2	Immunoglobulins direct Calibrator Set	6	Four parameters	42 42	42 42	26 - 2600 mg/dl	S	DIL, C-CLEAN	- X X 0		700 - 1600 mg/dl; 7.0 - 16.0 g/l
11502600	1 x 250																
IMMUNOGLOBULINS direct IgM																	
11503300	1 x 100	IgM	Immunoturbidimetry	mg/dl; g/l	R	R2	Immunoglobulins direct Calibrator Set	6	Four parameters	42 42	42 42	7 - 395 mg/dl	S	DIL, C-CLEAN	- X X 0		m: 40 - 230 mg/dl; 0.4 - 2.3 g/l f: 40 - 280 mg/dl; 0.4 - 2.8 g/l
11503600	1 x 250																
IRON TPTZ liquicolor																	
12290300	2 x 100	Fe	TPTZ	µg/dl; µmol/l	R		AUTOCAL	1	Linear	56 30	30 30	10 - 1000 µg/dl; 2 - 179 µmol/l	S; HEP	DIL	X X -		m: 59 - 158 µg/dl; 10.6 - 28.3 µmol/l f: 37 - 145 µg/dl; 6.6 - 26.0 µmol/l
12290600	2 x 180																
LDH SCE mod. liquiUV																	
12014300	2 x 100	LDH-P	Pyruvate, 37°C, SCE	U/l; µkat/l	R		AUTOCAL	1	Linear	56 56	56 56	15 - 1600 U/l; 0.25 - 26.7 µkat/l	S; EDTA; HEP	DIL	X X -		225 - 450 U/l; 3.75 - 7.50 µkat/l
12014600	2 x 180																
LDL CHOLESTEROL liquicolor																	
10094600	2 x 90	LDL-C	Homogenous enzymatic assay	mg/dl; mmol/l	R		AUTOCAL	1	Linear	56	14	5 - 300 mg/dl; 0.13 - 7.76 mmol/l	S; EDTA; HEP	DIL	- X -		≤100 mg/dl; ≤2.59 mmol/l
12006600	2 x 100	LIP	Methylresorufin, 37°C	U/l; µkat/l	R		AUTOCAL	1	Linear	21	21	2 - 300 U/l; 0.03 - 5.0 µkat/l	S; HEP	DIL	- X -		13 - 60 U/l; 0.2 - 1 µkat/l
12006600	2 x 100	LIP	Methylresorufin, 37°C	U/l; µkat/l	R		AUTOCAL	1	Linear	21	21	2 - 300 U/l; 0.03 - 5.0 µkat/l	S; HEP	DIL	- X -		13 - 60 U/l; 0.2 - 1 µkat/l

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																	m = male f = female
MAGNESIUM liquicolor																	
10010300	4 x 30	Mg	Xylyl blue	mg/dl; mmol/l	R	R1	AUTOCAL	1	Linear	2	1	0.30 – 4.80 mg/dl; 0.13 – 2.00 mmol/l	S; HEP	DIL	X X –		1.7 - 2.6 mg/dl; 0.70 - 1.05 mmol/l
10010600	4 x 60									3	1						
MICROALBUMIN																	
11120600	1 x 90	MALB	Immunoturbidimetry	mg/l	R	R2	MICROALBUMIN Standard	1	Linear	49	30	5 - 400 mg/l(5)	collected urine; spot urine	DIL, C-CLEAN	– – –		m: <30 mg/24h; <30 mg/g Crea; ≤ 2.5 mg/mmol Crea f: <30 mg/24h; <30 mg/g Crea; ≤ 3.5 mg/mmol Crea
PANCREAS-AMYLASE liquicolor																	
12009600	2 x 100	PAMY	EPS-G7, 37°C	U/l; μkat/l	R		AUTOCAL	1	Linear	56	56	5 - 2300 U/l; 0.08 - 38.3 μkat/l	S; EDTA; HEP	DIL	X X –		<53 U/l; <0.88 μkat/l
PHOSPHORUS liquirapid																	
10027300	4 x 30	PHOS	Molybdate (UV)	mg/dl; mmol/l	R		AUTOCAL	1	Linear	60	60	1.1 – 18.3 mg/dl; 0.36 – 5.91 mmol/l	S	DIL	X X –		2.6 - 4.5 mg/dl; 0.84 - 1.45 mmol/l
10027600	4 x 60									60	60						
POTASSIUM liquiUV																	
10120300	1 x 120	K	Enzymatic	mmol/l	R		POTASSIUM liquiUV Standard	2	Linear	56	7	2 – 8 mmol/l	S; Li-HEP	DIL-2	X X –		3.6 - 5.5 mmol/l
10120600	1 x 250									56	7						
RHEUMATOID FACTORS																	
11261300	1 x 100	RF-2	Immunoturbidimetry, Latex-enhanced	IU/ml; kIU/l	R		RF Standard	4	Poly-linear	90	14	15 - 100 IU/ml	S	DIL, SWA-2	– – X		≤20 IU/ml; ≤20 kIU/l
11261600	1 x 210									90	14						
SODIUM liquicolor																	
10113300	1 x 120	Na	Enzymatic	mmol/l	R		SODIUM liquicolor Standard	2	Linear	56	7	90 – 180 mmol/l	S; Li-HEP	DIL-2	X X –		135 - 145 mmol/l
10113600	1 x 250									56	7						
TOTAL PROTEIN liquicolor																	
10570300	2 x 150	TP	Biuret	g/dl; g/l	R	R1	AUTOCAL	1	Linear	28	28	0.2 - 12 g/dl; 2 - 120 g/l	S; EDTA; HEP	DIL	X X –		6.6 - 8.3 g/dl; 66 - 83 g/l
10570600	6 x 210									28	28						

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TRANSFERRIN																	
11115600	1 x 70	TRF	Immunoturbidimetry	mg/dl; g/l	R	R1	C3/C4/TRF Standard	6	Four parameters	63	63	3 – 850 mg/dl ^[5] or 0.03 – 8.50 g/ ^[5]	S	DIL, C-CLEAN	– – X		170 - 340 mg/dl; 1.70 - 3.4 g/l
TRIGLYCERIDES liquicolor^{mono}																	
10724300	3 x 60	TG	GPO PAP	mg/dl; mmol/l	R		AUTOCAL	1	Linear	56	56	10 - 1000 mg/dl; 0.11 - 11.4 mmol/l	S; EDTA; HEP	DIL	X X –		≤150 mg/dl; ≤1.71 mmol/l
10724600	3 x 210									56	56						
UREA liquiUV																	
10521300	2 x 150	UREA	Urease (UV)	mg/dl; mmol/l	R		AUTOCAL	1	Linear	56	56	5 - 350 mg/dl; 0.83 - 58.3 μmol/l	S; EDTA; HEP ²⁾	DIL	X X –		m: 18 - 55 mg/dl; 3.0 - 9.2 mmol/l f: 15 - 43 mg/dl; 2.6 - 7.2 mmol/l
10521600	5 x 250									56	56						
URIC ACID liquicolor plus																	
10694300	2 x 100	UA	Uricase	mg/dl; μmol/l	R		AUTOCAL	1	Linear	56	24	1 - 25 mg/dl; 59.5 - 1487 μmol/l	S; EDTA; HEP	DIL	X X –		m: 3.6 - 7.0 mg/dl; 214 - 416 μmol/l f: 2.3 - 6.0 mg/dl; 137 - 357 μmol/l
10694600	5 x 250									56	24						
URINARY TOTAL PROTEIN liquicolor																	
10590300	3 x 50	UTP	Pyrogallol red	mg/l; mg/dl	R		URINARY TOTAL PROTEIN Standard	1	Linear	56	28	50 – 2000 mg/l; 5 – 200 mg/dl	Urine; CSF	DIL, SWA-2	– – –		Urine: 24 - 141 mg/day CSF: < 500 mg/l; < 50 mg/dl

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