

**Artikel-Nr.: KG5048    Inhalt: 12 x 5 ml**  
**\*\*TYPISCHE WERTE\*\***

#### **INTENDED USE**

Liquid Chemistry Premium is intended for in-vitro diagnostic use in the quality control of clinical chemistry systems.

#### **DEVICE DESCRIPTION**

The unassayed chemistry controls are supplied at 2 levels, level 2 and 3.

#### **SAFETY PRECAUTIONS AND WARNINGS**

For in vitro diagnostic use only. Do not pipette by mouth. Exercise the normal precautions required for handling laboratory reagents.

Human source material from which this product has been derived has been tested at donor level for the Human Immunodeficiency Virus (HIV 1, HIV 2) antibody, Hepatitis B Surface Antigen (HbsAg), and Hepatitis C Virus (HCV) antibody and found to be NON-REACTIVE. FDA approved methods have been used to conduct these tests.

However, since no method can offer complete assurance as to the absence of infectious agents, this material and all patient samples should be handled as though capable of transmitting infectious diseases and disposed of accordingly.

Health and Safety Data Sheets are available on request.

#### **STORAGE AND STABILITY**

**OPENED:** Store refrigerated (+2 to 8°C). Thawed serum is stable for 7 days at +2 to +8°C, with the following exceptions:

Folate and Vitamin B12 are stable for 5 days at +2 to +8°C. Only the required amount of product should be removed. After use, any residual product should NOT BE RETURNED to the original vial.

**UNOPENED:** Store frozen at -20°C to – 80°C. Stable to expiration date printed on individual vials. (See limitations)

#### **LIMITATIONS**

For Total & Prostatic Acid Phosphatase the material should be stabilized by adding 1 drop (25-30µl) of 0.7M Acetic acid solution to 1ml of the serum after thawing. After stabilization Total & Prostatic Acid Phosphatase is stable for 7 days at +2 to +8°C.

Bilirubin in the serum is light sensitive and it is recommended that the serum be stored in the dark.

Total and Direct Bilirubin values will gradually decrease during the products shelf life.

Bacterial contamination of the reconstituted serum will cause reductions in the stability of many components. The control should not be used as a calibration material.

#### **PREPARATION**

1. Allow the frozen control to thaw at room temperature (+18°C to 25°C) until completely thawed. Swirl the contents to ensure homogeneity.
2. Refer to the control section of the individual analyser application.
3. Refrigerate any unused material. Prior to reuse, mix contents thoroughly.

#### **MATERIALS PROVIDED**

Liquid Chemistry Premium Level 2 12 x 5ml

#### **MATERIALS REQUIRED BUT NOT PROVIDED**

None

#### **ASSIGNED VALUES**

Approximate values are assigned from results obtained from internal testing conducted at BGT BioGenTechnologies GmbH.

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## LIQUID CHEMISTRY PREMIUM LEVEL 2

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### \*\*TYPISCHE WERTE\*\*

Parameter	Einheit	Zielwert	Methoden
Albumin (electrophoresis)	%	63.6	Electrophoresis
alpha-1-globulin (electrophoresis)	%	3.5	Electrophoresis
alpha-2-globulin (electrophoresis)	%	8.0	Electrophoresis
beta-globulin (electrophoresis)	%	12.4	Electrophoresis
gamma-globulin (electrophoresis)	%	12.5	Electrophoresis
alpha-HBDH	U/l	212	Phosphate buffer DGKC 37°C
	U/l	160	Phosphate buffer DGKC 30°C
	U/l	120	Phosphate buffer DGKC 25°C
Acid Phosphatase (Prostatic)	U/l	8.17	1-Naphthyl Phosphate substrate Kinetic 37°C
Acid Phosphatase (Total)	U/l	16.1	1-Naphthyl Phosphate substrate Kinetic 37°C
Albumin	g/l	39.8	Bromocresol Green
	g/dl	3.98	
Alkaline Phosphatase	U/l	301	Diethanolamine buffer DEA 37°C
	U/l	234	Diethanolamine buffer DEA 30°C
	U/l	192	Diethanolamine buffer DEA 25°C
Alpha-1-Acid Glycoprotein	g/l	0.47	Immunoturbidimetric
Alpha-1-Antitrypsin	g/l	1.01	Immunoturbidimetric
Alphafoetoprotein	KIU/l = IU/ml	1.90	Chemiluminescence
	ng/ml	2.30	
ALT (GPT)	U/l	38	Tris buffer no P5P IFCC/SFBC 37°C
	U/l	28	Tris buffer no P5P IFCC/SFBC 30°C
	U/l	21	Tris buffer no P5P IFCC/SFBC 25°C
Amylase Pancreatic	U/l	89	Randox EPS Liquid 37°C
Amylase Total	U/l	110	Randox EPS Liquid 37°C
Apolipoprotein A-1	g/l	1.02	Immunoturbidimetric
	mg/dl	102	
Apolipoprotein B	g/l	0.63	Immunoturbidimetric
	mg/dl	63.0	
AST (GOT)	U/l	40	Tris buffer no P5P IFCC/SFBC 37°C
	U/l	27	Tris buffer no P5P IFCC/SFBC 30°C
	U/l	19	Tris buffer no P5P IFCC/SFBC 25°C
Bicarbonate	mmol/l	23.8	Enzymatic
Bile Acids	µmol/l	35.0	5th Generation Colorimetric
Bilirubin Direct	µmol/l	21.9	Diazo with Sulphanilic Acid
	mg/dl	1.28	
Bilirubin Total	µmol/l	26.7	Diazo with Sulphanilic Acid
	mg/dl	1.56	
C-Reactive Protein	mg/l	2.87	Immunoturbidimetric
Caeruloplasmin	g/l	0.260	Nephelometric
Calcium	mmol/l	2.31	Cresolphthalein complexone
	mg/dl	9.26	

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Parameter	Einheit	Zielwert	Methoden
Calcium	mmol/l	1.16	Ionised calcium
	mg/dl	4.65	
Carbamazepine	µmol/l	36.3	Immunoturbidimetric
	µg/ml	8.58	
Carcinoembryonic Antigen (CEA)	ng/ml = µg/l	1.10	Chemiluminescence
Chloride	mmol/l	94.1	ISE indirect
Cholesterol	mmol/l	4.12	Cholesterol Oxidase CDC
	mg/dl	159	
Cholinesterase	U/l	5565	Colorimetric 37°C
CK Total	U/l	245	Phosphate buffer DGKC 37°C
	U/l	153	Phosphate buffer DGKC 30°C
	U/l	104	Phosphate buffer DGKC 25°C
Complement C3	g/l	0.91	Immunoturbidimetric
Complement C4	g/l	0.18	Immunoturbidimetric
Copper	µmol/l	17.0	Colorimetric
	µg/dl	108	
Cortisol	nmol/l	170	Radioimmunoassay
	µg/dl	6.12	
Creatinine	µmol/l	131	Alkaline picrate no deproteinization
	mg/dl	1.48	
D-3-Hydroxybutyrate	mmol/l	0.36	Enzymatic
Digoxin	nmol/l	1.97	Immunoturbidimetric
	ng/ml	1.54	
Ethanol	mg/dl	24.6	Enzymatic Colorimetric
Ferritin	ng/ml = µg/l	49.8	Abbott AXSYM
Folate	nmol/l	36.3	Chemiluminescence
	ng/ml	16.0	
Free T3	pmol/l	7.00	Chemiluminescence
	ng/dl	0.46	
	pg/ml	4.56	
Free Thyroxine (FT4)	pmol/l	14.0	Chemiluminescence
	pg/ml	10.9	
Gentamicin	µmol/l	7.09	Immunoturbidimetric
	µg/ml	3.39	
gamma-GT	U/l	64	Gamma glutamyl.-3-carboxy-4-nitroanilide 37°C
	U/l	50	Gamma glutamyl.-3-carboxy-4-nitroanilide 30°C
	U/l	39	Gamma glutamyl.-3-carboxy-4-nitroanilide 25°C
GLDH	U/l	17	DGKC 37°C
	U/l	13	DGKC 30°C
	U/l	11	DGKC 25°C
Glucose	mmol/l	5.70	Glucose oxidase
	mg/dl	103ILL	

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Parameter	Einheit	Zielwert	Methoden
Haptoglobin	g/l	89.9	Immunoturbidimetric
HDL - Cholesterol	mmol/l	1.31	Direct Clearance Method
	mg/dl	50.6	
Human Chorionic Gonadotrophin	mU/ml	23.0	Chemiluminescence
Immunoglobulin A	g/l	1.71	Immunoturbidimetric
Immunoglobulin E	KIU/l = IU/ml	64.9	Immunoturbidimetric
Immunoglobulin G	g/l	8.01	Immunoturbidimetric
Immunoglobulin M	g/l	0.64	Immunoturbidimetric
Iron	µmol/l	21.3	Colorimetric without ppt.
	µg/dl	119	
Lactate	mmol/l	1.40	Enzymatic Colorimetric
	mg/dl	12.6	
LAP	U/l	20	NAGEL 37°C
LD (LDH)	U/l	386	Phosphate buffer DGKC 37°C
	U/l	279	Phosphate buffer DGKC 30°C
	U/l	196	Phosphate buffer DGKC 25°C
LDL - Cholesterol	mmol/l	2.20	Direct Clearance Method
	mg/dl	84.9	
Lipase	U/l	74	Randox Colorimetric 37°C
Lipoprotein (a)	mg/dl	18.0	Immunoturbidimetric
	nmol/L	180	
Lithium	mmol/l	0.91	Colorimetric
	mg/dl	0.63	
Magnesium	mmol/l	0.98	Xylidyl Blue
	mg/dl	2.38	
Myoglobin	ng/ml	40.5	Immunoturbidimetric
Osmolality	mOsm/kg	758	Freezing point depression
Paracetamol	mmol/l	0.05	Immunoturbidimetric
	mg/l	7.01	
Phenobarbital	µmol/l	126	Immunoturbidimetric
	µg/ml	29.2	
Phenytoin	µmol/l	48.2	Immunoturbidimetric
	µg/ml	12.2	
Phosphate Inorganic	mmol/l	1.43	Phosphomolybdate UV
	mg/dl	4.43	
Potassium	mmol/l	4.00	ISE indirect
Prealbumin	g/l	0.24	Immunoturbidimetric
Prolactin	µU/ml	140	Chemiluminescence
Protein Total	g/l	60.6	Biuret reaction end point
	g/dl	6.06	
PSA Total	ng/ml = µg/l	7.00	Chemiluminescence
Salicylate	mmol/l	0.63	Colorimetric Trinder
	mg/dl	8.74L	

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Sodium	mmol/l	139	ISE indirect
Theophylline	µmol/l µg/ml	28.6 5.15	Immunoturbidimetric
Thyroid Stimulating Hormone	µU/ml = mIU/l	1.50	Chemiluminescence
Thyroxine (T4)	nmol/l µg/dl	90.0 7.02	Chemiluminescence
TIBC	µmol/l µg/dl	7.74 43.3	FE+UIBC(saturation with iron)
Transferrin	g/l	1.91	Immunoturbidimetric
Triglycerides	mmol/l mg/dl	0.94 83.2	Enzymatic Colorimetric
Triiodothyronine (T3)	nmol/l ng/ml	2.30 1.50	Chemiluminescence
Troponin I	ng/ml = µg/l	0.15	Chemiluminescence
Troponin T	µg/L	0.01	Chemiluminescence
Urea	mmol/l mg/dl	7.42 44.6	Enzymatic
Uric Acid (Urate)	mmol/l mg/dl	0.35 5.88	Uricase Peroxidase with ascorbate oxidase @ 546nm
Valproic Acid	µmol/l µg/ml	547 78.9	Immunoturbidimetric
Vancomycin	µmol/l µg/ml	9.42 14.0	Polarisation Fluoroimmunoassay
Vitamin B12	pmol/l pg/ml	207 280	Chemiluminescence
Zinc	µmol/l µg/dl	34.4 225	Colorimetric