

MLM Medical Labs GmbH is accredited according to DIN EN ISO 15189:2014 by the German Accreditation Body DAkkS.

Within the flexible scope of accreditation, MLM Medical Labs is permitted to modify and further develop or develop new test procedures without information or prior approval from DAkkS.

The currently validated test methods in the flexible test areas marked with \* are listed below

### Medical laboratory field: Clinical chemistry

#### Type of examination :

#### Agglutination tests\*

Analyte (measurement parameter)	Test material (matrix)	Test technique	QM Document	Analyzer	CE-method	in-house method
Amphetamine	Urine	KIMS	SOP-MG-LAB.M.0096.4	Roche Cobas® 6000	x	
Barbiturate	Urine	KIMS	SOP-MG-LAB.M.0097.5	Roche Cobas® 6000	x	
Benzodiazepine	Urine	KIMS	SOP-MG-LAB.M.0098.5	Roche Cobas® 6000	x	
Cannabinoids	Urine	KIMS	SOP-MG-LAB.M.0099.3	Roche Cobas® 6000	x	
Cocain + metabolits	Urine	KIMS	SOP-MG-LAB.M.0100.4	Roche Cobas® 6000	x	
CRP	Serum EDTA plasma Li-Heparin plasma	Latex agglutination test	SOP-MG-LAB.M.0017.3	Roche Cobas® 6000	x	
Cystatin C	Serum EDTA plasma Li-Heparin plasma	Latex agglutination test	SOP-MG-LAB.M.0064.5	Roche Cobas® 6000	x	
Methadone + metabolits	Urine	KIMS	SOP-MG-LAB.M.0101.5	Roche Cobas® 6000	x	
Opiate	Urine	KIMS	SOP-MG-LAB.M.0102.3	Roche Cobas® 6000	x	
Phencyclidine + metabolits	Urine	KIMS	SOP-MG-LAB.M.0110.3	Roche Cobas® 6000	x	

#### Type of examination :

#### Chromatography (High performance liquid chromatography (HPLC))\*

Analyte (measurement parameter)	Test material (matrix)	Test technique	QM Document	Analyzer	CE-method	in-house method
Adrenaline	EDTA plasma	ECD	SOP-MG-HPL.M.0004.5	Waters Alliance	x	
Adrenaline	Urine	ECD	SOP-MG-HPL.M.0013.1	Waters Alliance	x	
HbA1c	EDTA blood	UV detection	SOP-MG-LAB.M.0083.6	TOSOH G8	x	
Noradrenaline	EDTA plasma	ECD	SOP-MG-HPL.M.0004.5	Waters Alliance	x	
Noradrenaline	Urine	ECD	SOP-MG-HPL.M.0013.1	Waters Alliance	x	

**Type of examination:**

**Flow cytometry\***

Analyte (measurement parameter)	Test material (matrix)	Test technique	QM Document	Analyzer	CE-method	in-house method
Complete blood count	EDTA blood	Cell-number determination / differentiation	SOP-MG-LAB.M.0125.3	Sysmex XN-1000	x	
Blood count	EDTA blood	Cell-number determination / differentiation	SOP-MG-LAB.M.0125.3	Sysmex XN-1000	x	
Reticulocytes	EDTA blood	Cell-number determination / differentiation	SOP-MG-LAB.M.0125.3	Sysmex XN-1000	x	

**Type of examination:**

**Electrochemical tests\***

Analyte (measurement parameter)	Test material (matrix)	Test technique	QM Document	Analyzer	CE-method	in-house method
Chloride	Serum Heparin plasma Urine	Potentiometry (ISE)	SOP-MG-LAB.M.0034.3	Roche Cobas® 6000	x	
Potassium	Serum Heparin plasma Urine	Potentiometry (ISE)	SOP-MG-LAB.M.0024.4	Roche Cobas® 6000	x	
Sodium	Serum Heparin plasma Urine	Potentiometry (ISE)	SOP-MG-LAB.M.0033.4	Roche Cobas® 6000	x	

**Type of examination:**

**Coagulometry\***

Analyte (measurement parameter)	Test material (matrix)	Test technique	QM Document	Analyzer	CE-method	in-house method
aPTT	Citrate plasma	Coagulometry	SOP-MG-LAB.M.0076.4	Stago STA Compact Max® 3	x	
D-Dimer	Citrate plasma	Coagulometry	SOP-MG-LAB.M.0078.2	Stago STA Compact Max® 3	x	
Fibrinogen	Citrate plasma	Coagulometry	SOP-MG-LAB.M.0075.4	Stago STA Compact Max® 3	x	
Prothrombin time (PT/Quick/INR)	Citrate plasma	Coagulometry	SOP-MG-LAB.M.0077.4	Stago STA Compact Max® 3	x	
Thrombin time	Citrate plasma	Coagulometry	SOP-MG-LAB.M.0086.3	Stago STA Compact Max® 3	x	

**Type of examination:**

**Ligand assays\***

Analyte (measurement parameter)	Test material (matrix)	Test technique	QM Document	Analyzer	CE-method	in-house method
Cortisol	Serum EDTA plasma Li-Heparin plasma	ECLIA	SOP-MG-LAB.M.0003.3	Roche Cobas® 6000	x	
C-peptide	Serum EDTA plasma Li-Heparin plasma Urine	ECLIA	SOP-MG-LAB.M.0039.5	Roche Cobas® 6000	x	
Estradiol	Serum EDTA plasma Li-Heparin plasma	ECLIA	SOP-MG-LAB.M.0089.4	Roche Cobas® 6000	x	
Ferritin	Serum EDTA plasma Heparin plasma	ECLIA	SOP-MG-LAB.M.0025.4	Roche Cobas® 6000	x	
FSH	Serum EDTA plasma Heparin plasma	ECLIA	SOP-MG-LAB.M.0012.2	Roche Cobas® 6000	x	
FT3	Serum EDTA plasma Li-Heparin plasma	ECLIA	SOP-MG-LAB.M.0069.2	Roche Cobas® 6000	x	

Analyte (measurement parameter)	Test material (matrix)	Test technique	QM Document	Analyzer	CE-method	in-house method
FT4	Serum EDTA plasma Li-Heparin plasma	ECLIA	SOP-MG-LAB.M.0071.3	Roche Cobas® 6000	x	
Glucagon	EDTA plasma + aprotinin P800 plasma	RIA	SOP-MG-RIA.M.0001.4	Perkin Elmer Gamma Counter Wizard 2470	x	
hCG-β	Serum EDTA plasma Heparin plasma	ECLIA	SOP-MG-LAB.M.0067.4	Roche Cobas® 6000	x	
IL-6	Serum EDTA plasma Li-Heparin plasma	ECLIA	SOP-MG-LAB.M.0090.2	Roche Cobas® 6000	x	
Insulin	Serum EDTA plasma Li-Heparin plasma	ECLIA	SOP-MG-LAB.M.0002.6	Roche Cobas® 6000	x	
LH	Serum EDTA plasma Heparin plasma NaF plasma	ECLIA	SOP-MG-LAB.M.0011.2	Roche Cobas® 6000	x	
NT-pro BNP	Serum EDTA plasma Heparin plasma	ECLIA	SOP-MG-LAB.M.0008.4	Roche Cobas® 6000	x	
Progesterone	Serum EDTA-Plasma Heparin-Plasma NaF-Plasma	ECLIA	SOP-MG-LAB.M.0010.2	Roche Cobas® 6000	x	
Prolactin	Serum EDTA plasma Li-Heparin plasma	ECLIA	SOP-MG-LAB.M.0009.2	Roche Cobas® 6000	x	
Renin activity	EDTA plasma	RIA	SOP-MG-RIA.M.0006.3	Perkin Elmer Gamma Counter Wizard 2470	x	

Analyte (measurement parameter)	Test material (matrix)	Test technique	QM Document	Analyzer	CE-method	in-house method
T3	Serum EDTA plasma Heparin plasma NaF plasma Citrate plasma	ECLIA	SOP-MG-LAB.M.0068.2	Roche Cobas® 6000	x	
T4	Serum EDTA plasma Heparin plasma	ECLIA	SOP-MG-LAB.M.0070.3	Roche Cobas® 6000	x	
Testosterone	Serum EDTA plasma Li-Heparin plasma	ECLIA	SOP-MG-LAB.M.0095.2	Roche Cobas® 6000	x	
Tricyclic antidepressants	Urine	EIA	SOP-MG-LAB.M.0048.5	Roche Cobas® 6000	x	
Troponin T	Serum EDTA plasma Heparin plasma	ECLIA	SOP-MG-LAB.M.0079.5	Roche Cobas® 6000	x	
TSH	Serum EDTA plasma Heparin plasma	ECLIA	SOP-MG-LAB.M.0072.3	Roche Cobas® 6000	x	
25-OH-Vitamin D3	Serum EDTA plasma Li-Heparin plasma	ECLIA	SOP-MG-LAB.M.0130.2	Roche Cobas® 6000	x	

**Type of examination:**

**Microscopy\***

Analyte (measurement parameter)	Test material (matrix)	Test technique	QM Document	Analyzer	CE-method	in-house method
Urine sediment	Urine	Bright-field microscopy	SOP-MG-LAB.M.0082.3	Manual	x	

**Type of examination:**

**Osmometry**

Analyte (measurement parameter)	Test material (matrix)	Test technique	QM Document	Analyzer	CE-method	in-house method
Osmolality	Serum Urine	Cryoscopy	SOP-MG-MDL.M.0020.2	Advanced Instruments Micro Osmometer	x	

Type of examination:

**Spectrometry (Photometry)\***

Analyte (measurement parameter)	Test material (matrix)	Test technique	QM Document	Analyzer	CE-method	in-house method
ALAT (ALT, GPT)	Serum EDTA plasma Li-Heparin plasma	Photometry	SOP-MG-LAB.M.0019.3	Roche Cobas® 6000	x	
Albumin	Serum EDTA plasma Li-Heparin plasma	Photometry	SOP-MG-LAB.M.0029.3	Roche Cobas® 6000	x	
Alkaline phosphatase	Serum Li-Heparin plasma	Photometry	SOP-MG-LAB.M.0028.3	Roche Cobas® 6000	x	
Alcohol/ Ethanol	Serum EDTA-Plasma Li-Heparin-Plasma Urin	Photometry	SOP-MG-LAB.M.0103.2	Roche Cobas® 6000	x	
Amylase α	Serum Li-Heparin plasma Urine	Photometry	SOP-MG-LAB.M.0058.3	Roche Cobas® 6000	x	
ASAT (AST, GOT)	Serum EDTA plasma Li-Heparin plasma	Photometry	SOP-MG-LAB.M.0018.4	Roche Cobas® 6000	x	
Bicarbonate	Serum Li-Heparin plasma	Photometry	SOP-MG-LAB.M.0036.4	Roche Cobas® 6000	x	
Bilirubin	Urine	Reflectance Photometry	SOP-MG-LAB.M.0081.2	Roche Cobas®u 411	x	
Bilirubin total	Serum EDTA plasma Li-Heparin plasma	Photometry	SOP-MG-LAB.M.0021.2	Roche Cobas® 6000	x	
Bilirubin direct	Serum EDTA plasma Li-Heparin plasma	Photometry	SOP-MG-LAB.M.0060.4	Roche Cobas® 6000	x	

Analyte (measurement parameter)	Test material (matrix)	Test technique	QM Document	Analyzer	CE-method	in-house method
Calcium	Serum Li-Heparin plasma Urine (acidified)	Photometry	SOP-MG-LAB.M.0027.4	Roche Cobas® 6000	x	
Cholesterol	Serum EDTA plasma Li-Heparin plasma	Photometry	SOP-MG-LAB.M.0052.3	Roche Cobas® 6000	x	
Cholinesterase	Serum EDTA plasma Li-Heparin plasma	Photometry	SOP-MG-LAB.M.0059.2	Roche Cobas® 6000	x	
CK	Serum Li-Heparin plasma	Photometry	SOP-MG-LAB.M.0053.3	Roche Cobas® 6000	x	
CK-MB	Serum Li-Heparin plasma	Photometry	SOP-MG-LAB.M.0054.5	Roche Cobas® 6000	x	
Creatinine	Serum EDTA plasma Li-Heparin plasma Urine	Photometry	SOP-MG-LAB.M.0035.4	Roche Cobas® 6000	x	
Iron	Serum Li-Heparin plasma	Photometry	SOP-MG-LAB.M.0074.2	Roche Cobas® 6000	x	
GGT	Serum EDTA plasma Li-Heparin plasma	Photometry	SOP-MG-LAB.M.0020.2	Roche Cobas® 6000	x	
GLDH	Serum EDTA plasma Li-Heparin plasma	Photometry	SOP-MG-LAB.M.0061.3	Roche Cobas® 6000	x	
Glucose	GlucoEXACT FCMix Serum NaF plasma Urine	Photometry	SOP-MG-LAB.M.0022.6	Roche Cobas® 6000	x	
Glucose	Urine	Reflectance Photometry	SOP-MG-LAB.M.0081.2	Roche Cobas®u 411	x	
Hemoglobin	Urine	Reflectance Photometry	SOP-MG-LAB.M.0081.2	Roche Cobas®u 411	x	

Analyte (measurement parameter)	Test material (matrix)	Test technique	QM Document	Analyzer	CE-method	in-house method
Urin acid	Serum EDTA plasma Li-Heparin plasma Urine	Photometry	SOP-MG-LAB.M.0032.3	Roche Cobas® 6000	x	
Urea	Serum EDTA plasma Li-Heparin plasma Urine	Photometry	SOP-MG-LAB.M.0037.4	Roche Cobas® 6000	x	
HDL-cholesterol	Serum Li-Heparin plasma	Photometry	SOP-MG-LAB.M.0055.4	Roche Cobas® 6000	x	
Hydroxybutyrate dehydrogenase (HBDH)	Serum EDTA plasma Li-Heparin plasma	Photometry	SOP-MG-LAB.M.0063.2	Roche Cobas® 6000	x	
Ketone	Urine	Reflectance Photometry	SOP-MG-LAB.M.0081.2	Cobas®u 411	x	
Lactate	NaF plasma Na-heparin plasma Cerebrospinal fluid	Photometry	SOP-MG-LAB.M.0062.2	Roche Cobas® 6000	x	
LDH	Serum Li-Heparin plasma	Photometry	SOP-MG-LAB.M.0030.5	Roche Cobas® 6000	x	
LDL cholesterol	Serum EDTA plasma Li-Heparin plasma	Photometry	SOP-MG-LAB.M.0056.3	Roche Cobas® 6000	x	
Leukocytes	Urine	Reflectance Photometry	SOP-MG-LAB.M.0081.2	Cobas®u 411	x	
Lipase	Serum Li-Heparin plasma	Photometry	SOP-MG-LAB.M.0057.5	Roche Cobas® 6000	x	
Magnesium	Serum Li-Heparin plasma Urin (acidified)	Photometry	SOP-MG-LAB.M.0038.5	Roche Cobas® 6000	x	
Nitrite	Urine	Reflectance Photometry	SOP-MG-LAB.M.0081.2	Cobas®u 411	x	
Pancreatic amylase	Serum Li-Heparin plasma Urine	Photometry	SOP-MG-LAB.M.0113.2	Roche Cobas® 6000	x	



Analyte (measurement parameter)	Test material (matrix)	Test technique	QM Document	Analyzer	CE-method	in-house method
pH value	Urine	Reflectance Photometry	SOP-MG-LAB.M.0081.2	Cobas®u 411	x	
Phosphate	Serum EDTA plasma Li-Heparin plasma Urine	Photometry	SOP-MG-LAB.M.0026.5	Roche Cobas® 6000	x	
Total protein	Serum EDTA-Plasma Li-Heparin-Plasma	Photometry	SOP-MG-LAB.M.0031.4	Roche Cobas® 6000	x	
Protein	Urine	Reflectance Photometry	SOP-MG-LAB.M.0081.2	Cobas®u 411	x	
Specific weight	Urine	Reflectance Photometry	SOP-MG-LAB.M.0081.2	Cobas®u 411	x	
Triglycerides	Serum EDTA plasma Li-Heparin plasma	Photometry	SOP-MG-LAB.M.0051.4	Roche Cobas® 6000	x	
Urobilinogen	Urine	Reflectance Photometry	SOP-MG-LAB.M.0081.2	Cobas®u 411	x	

**Type of examination:**

**Spectrometry (Turbidimetry)\***

Analyte (measurement parameter)	Test material (matrix)	Test technique	QM Document	Analyzer	CE-method	in-house method
Albumin	Urine	Turbidimetry	SOP-MG-LAB.M.0085.6	Roche Cobas® 6000	x	
Protein total	Urine	Turbidimetry	SOP-MG-LAB.M.0112.4	Roche Cobas® 6000	x	
Transferrin	Serum Li-Heparin plasma	Turbidimetry	SOP-MG-LAB.M.0107.3	Roche Cobas® 6000	x	

**Type of examination:**

**Spectrometry (Nephelometry / Immunnephelometry)\***

Analyte (measurement parameter)	Test material (matrix)	Test technique	QM Document	Analyzer	CE-method	in-house method
Cystatin C	Serum	Nephelometry	SOP-MG-MDL.M.0024.1	Siemens BN II	x	

**Medical laboratory field: Virology**

**Type of examination:**

**Ligand assays\***

Analyte (measurement parameter)	Test material (matrix)	Test technique	QM Document	Analyzer	CE-method	in-house method
Hepatitis Bs antigen	Serum EDTA plasma Li-Heparin plasma Citrate plasma	ECLIA	SOP-MG-LAB.M.0065.5	Roche Cobas® 6000	x	
Hepatitis C antibodies	Serum EDTA plasma Heparin plasma Citrate plasma	ECLIA	SOP-MG-LAB.M.0066.4	Roche Cobas® 6000	x	
HIV-1/2 antibodies	Serum EDTA plasma Citrate plasma Heparin plasma	ECLIA	SOP-MG-LAB.M.0073.3	Roche Cobas® 6000	x	

**Medical laboratory field: Microbiological examinations (Amplification method)\***

Analyte (measurement parameter)	Test material (matrix)	Test technique	QM Document	Analyzer	CE-method	in-house method
SARS-CoV-2	Nasal, pharyngeal and nasopharyngeal smear	Real-time PCR	SOP-MG-PCR.M.0001.2	Bio-Rad CFX96 Dx	x	