

## Deutsche Akkreditierungsstelle

### Annex to the accreditation certificate D-ML-19241-01-00 according to DIN EN ISO 15189:2024

**Valid from:** 23.04.2025  
**Date of issue:** 08.09.2025

Holder of accreditation certificate

**Labor Dr. Fenner und Kollegen**  
**Medizinisches Versorgungszentrum für Labormedizin und Humangenetik GmbH**  
**Bergstr. 14, 20095 Hamburg**

with the location

**Labor Dr. Fenner und Kollegen**  
**Medizinisches Versorgungszentrum für Labormedizin und Humangenetik GmbH**  
**Bergstr. 14, 20095 Hamburg**

The medical laboratory meets the requirements of DIN EN ISO 15189:2024 to carry out the conformity assessment activities listed in this annex. The medical laboratory meets additional legal and normative requirements, if applicable, including those in relevant sectoral schemes, provided that these are explicitly confirmed below.

The management system requirements of DIN EN ISO 15189 are written in the language relevant to the operations of medical laboratories and confirm generally with the principles of DIN EN ISO 9001.

*This certificate annex is only valid together with the written accreditation certificate and reflects the status as indicated by the date of issue. The current status of any given scope of accreditation can be found in the directory of accredited bodies maintained by Deutsche Akkreditierungsstelle ([www.dakks.de](http://www.dakks.de)).*

**Examinations in the field:**

Medical Laboratory Diagnostics

**Medical laboratory fields:**

Clinical chemistry

Immunology

Human genetics (molecular human genetics, cytogenetics)

Microbiology

Virology

Transfusion medicine

**Flexible accreditation area:**

The medical laboratory is permitted to use the standardized or equivalent test procedures with different versions listed here within the designated test areas, without the need for prior information and approval from DAkkS,

[Flex A] in the area of medical laboratories, equivalent test procedures in this category also include test procedures validated by the laboratory and confirmed by an accreditation decision. This only applies to new versions (revisions) of confirmed test procedures without the analyte, matrix or test technology being changed.

[Flex B] the free selection of standardized or equivalent test procedures is permitted.

[Flex C] the modification and further development of test procedures and new developments is permitted.

The test procedures listed are examples. The medical laboratory has a current list of all test procedures in the flexible accreditation area. The list is publicly available on the medical laboratory's website.

## Medical laboratory field: Clinical chemistry

### Type of examination:

#### Chromatography (gas chromatography mass spectrometry (GC-MS))<sup>[Flex C]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
qualitative determination of amphetamines, benzodiazepines, opiates, methadon, tricyclic antidepressants, cocaine, designer drugs and other drugs	Urine	GC/MS

### Type of examination:

#### Chromatography (High Performance Liquid Chromatography (HPLC))<sup>[Flex C]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
5-Hydroxyindoleacetic Acid	Urine	HPLC - ECD
HbA1c	EDTA blood	HPLC - VIS
Homocysteine	Serum, plasma (all additives except lithium heparin), citrated blood	HPLC - FLD
Homovanillinmandelic acid	Urine	HPLC - ECD
Catecholamines (adrenaline, dopamine, norepinephrine)	Urine	HPLC - ECD
Serotonin	Serum, EDTA blood	HPLC - ECD
Tryptophan	Serum	HPLC - FID
Vanillin mandelic acid	Urine	HPLC - ECD
Vitamin A	Serum	HPLC - UV
Vitamin B1	EDTA blood	HPLC - FLD
Vitamin B2	EDTA blood	HPLC - FLD
Vitamin B6	Serum, EDTA plasma	HPLC - FLD
Vitamin C	EDTA plasma	HPLC - UV
Vitamin E	Serum	HPLC - UV

### Type of examination:

#### Chromatography (High Performance Liquid Chromatography / Mass Spectrometry (LCMS/MS))<sup>[Flex C]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
10-OH-carbazepine	Serum, EDTA plasma	LCMS/MS
17-OH progesterone	Serum	LCMS/MS
Aldosterone	Serum	LCMS/MS
Amiodarone	Serum, EDTA plasma	LCMS/MS
Androstenedione	Serum	LCMS/MS
Aripiprazole	Serum, EDTA plasma	LCMS/MS
Brivaracetam	Serum, EDTA plasma	LCMS/MS
Buprenorphine, norbuprenorphine	Urine, serum	LCMS/MS

Analyte (measurement parameter)	Test material (matrix)	Test technique
Carbamazepine	Serum, EDTA plasma	LCMS/MS
Carbamazepine diol	Serum, EDTA plasma	LCMS/MS
Carbamazepine epoxide	Serum, EDTA plasma	LCMS/MS
Citalopram	Serum, EDTA plasma	LCMS/MS
Clozapine, desmethylclozapine	Serum, EDTA plasma	LCMS/MS
Cortisol	Saliva, Urine	LCMS/MS
Cyclosporine	EDTA blood	LCMS/MS
Desmethylmesuximide	Serum, EDTA plasma	LCMS/MS
DHEA	Serum	LCMS/MS
Drugs	Saliva, serum/EDTA plasma, capillary blood	LCMS/MS
Duloxetine	Serum, EDTA plasma	LCMS/MS
Ethosuximide	Serum, EDTA plasma	LCMS/MS
Ethyl glucuronide	Urine, serum	LCMS/MS
Ethyl sulphate	Urine, serum	LCMS/MS
Everolimus	EDTA blood	LCMS/MS
Felbamate	Serum, EDTA plasma	LCMS/MS
Fluoxetine, desmethylfluoxetine	Serum, EDTA plasma	LCMS/MS
Fluvoxamine	Serum, EDTA plasma	LCMS/MS
Gabapentin	Serum, EDTA plasma	LCMS/MS
Haloperidol	Serum, EDTA plasma	LCMS/MS
Lacosamide	Serum, EDTA plasma	LCMS/MS
Lamotrigine	Serum, EDTA plasma	LCMS/MS
Levetiracetam	Serum, EDTA plasma	LCMS/MS
LSD	Urine	LCMS/MS
Metanephrin	Urine	LCMS/MS
Normetanephrin	Urine	LCMS/MS
Metanephrine / Normetanephrine	EDTA plasma	LCMS/MS
Methylmalonic acid	Serum, Urine	LCMS/MS
Mirtazapine	Serum, EDTA plasma	LCMS/MS
Olanzapine, N-desmethyloanzapine	Serum, EDTA plasma	LCMS/MS
Oxcarbazepine	Serum, EDTA plasma	LCMS/MS
Paroxetine	Serum, EDTA plasma	LCMS/MS
Perampanel	Serum, EDTA plasma	LCMS/MS
Phenobarbital	Serum, EDTA plasma	LCMS/MS
Phosphatidylethanol	EDTA blood, citrated blood, capillary blood	LCMS/MS

Analyte (measurement parameter)	Test material (matrix)	Test technique
Pregabalin	Serum, EDTA plasma	LCMS/MS
Pregabalin	Urine	LCMS/MS
Primidone	Serum, EDTA plasma	LCMS/MS
Quetiapine	Serum, EDTA plasma	LCMS/MS
Risperidone, 9-OH-risperidone	Serum, EDTA plasma	LCMS/MS
Rufinamide	Serum, EDTA plasma	LCMS/MS
Sertraline, N-desmethysertraline	Serum, EDTA plasma	LCMS/MS
Sirolimus	EDTA blood	LCMS/MS
Stiripentol	Serum, EDTA plasma	LCMS/MS
Sulthiam	Serum, EDTA plasma	LCMS/MS
Tacrolimus	EDTA blood	LCMS/MS
THC-COOH, qualitative	Urine	LCMS/MS
Theophylline	Serum, EDTA plasma	LCMS/MS
Tiagabin	Serum, EDTA plasma	LCMS/MS
Topiramate	Serum, EDTA plasma	LCMS/MS
Venlafaxine, O-desmethylvenlafaxine	Serum, EDTA plasma	LCMS/MS
Vigabatrin	Serum, EDTA plasma	LCMS/MS
Zonisamide	Serum, EDTA plasma	LCMS/MS
Valproinat	Serum, EDTA plasma	LCMS/MS

**Type of examination:****Flow cytometry (incl. determination of particle properties)<sup>[Flex B]</sup>**

Analyte (measurement parameter)	Test material (matrix)	Test technique
Blood cells - erythrocytes - platelets	EDTA blood	Particle/cell counting using the impedance method (resistance change measurement) and further calculation
Blood cells - leukocytes - monocytes - lymphocytes - granulocytes - eosinophils - platelets - basophils	EDTA blood	Flow cytometry using semiconductor lasers
Blood cells - leukocytes	CSF, punctate	Flow cytometry using semiconductor lasers
Hematocrit	EDTA blood	Particle/cell counting using the impedance method (resistance change measurement) and further calculation

Analyte (measurement parameter)	Test material (matrix)	Test technique
MCV MCH MCHC	EDTA blood	Calculation from mean values of the erythrocyte measurement and the haemoglobin determination
Reticulocytes	EDTA blood	Flow cytometry using semiconductor lasers
Reticulocyte Hb (Ret-HE)	EDTA blood	Flow cytometry using semiconductor lasers

**Type of examination:****Electrochemical examinations**<sup>[Flex C]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
Chloride	Serum, lithium heparin plasma, urine	Ion-sensitive electrodes
Potassium	Serum, lithium heparin plasma, urine	Ion-sensitive electrodes
Sodium	Serum, lithium heparin plasma, urine	Ion-sensitive electrodes
pH value (drug screening test)	Urine	pH meter

**Type of examination:****Electrophoresis**<sup>[Flex B]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
CDT (carbohydrase-deficient transferrin)	Serum	Capillary zone electrophoresis
Protein electrophoresis	Serum	Capillary zone electrophoresis
Paraproteins	Serum	Immunofixation electrophoresis
Paraproteins	Urine	Immunofixation electrophoresis

**Type of examination:****Spectrometry (Turbidimetry)**<sup>[Flex B]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
Derived fibrinogen	Citrated plasma	Determination of the concentration by measuring the change in turbidity in the coagulation test and comparing it with a standard curve
Current Partial thromboplastin time (aPTT)	Citrated plasma	Determination of the clotting time in seconds
APC resistance by measuring aPTT with/without addition of activated protein C (APC)	Citrated plasma	Determination of the clotting time and calculation of a ratio
C-reactive protein	Serum, lithium heparin plasma	Turbidimetry
D-dimer concentration	Citrated plasma	Turbidimetry

Analyte (measurement parameter)	Test material (matrix)	Test technique
Factor VIII (VIII: C) activity	Citrated plasma	Determination of the partial thromboplastin time after incubation with corresponding factor-deficient plasma
Fibrinogen according to Claus	Citrated plasma	Turbidimetry
Haemoglobin	Stool	Immunoturbidimetry
highly sensitive CRP	Serum, heparin plasma, EDTA plasma	Turbidimetry
Lipoprotein (a)	Serum, lithium heparin plasma	Turbidimetry
Lupus anticoagulant qualitative	Citrated plasma	Determination of the clotting time with a specific reagent and reference to a normal plasma
Protein C-activity	Citrated plasma	Determination of protein C-activity with chromogene sub-strate via activation of protein C (measurement of absorption)
Rheumatoid factor	Serum	Turbidimetry
Transferrin	Serum, lithium heparin plasma	Turbidimetry
Thromboplastin time (Quick)	Citrated plasma	Determination of the clotting time in seconds, based on a normal plasma

**Type of examination:****Ligand assays** <sup>[Flex B]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
1.25 dihydroxyvitamin D	Serum, EDTA plasma, lithium heparin	CLIA
17-beta-oestradiol	Serum, heparin plasma, EDTA plasma	CLIA
ACTH	EDTA plasma	CLIA
Aldosterone	Serum, EDTA plasma	CLIA
Alpha foetoprotein	Serum, amniotic fluid	CLIA
Amphetamine	Urine	ELISA (CEDIA)
Barbiturate	Urine	ELISA (CEDIA)
Benzodiazepine	Urine	ELISA (CEDIA)
Beta HCG	Serum	CLIA
CA 15-3	Serum	CLIA
CA 19-9	Serum	CLIA
CA125	Serum	CLIA
Cannabis	Urine	ELISA (CEDIA)
CEA	Serum	CLIA
Cocaine	Urine	ELISA (CEDIA)
Cortisol	Serum	CLIA
C-peptide	Serum	CLIA
DHEAS	Serum	CLIA
Digoxin	Serum	CLIA
Ferritin	Serum, heparin plasma, EDTA plasma	CLIA

Analyte (measurement parameter)	Test material (matrix)	Test technique
Folic acid	Serum	CLIA
FSH	Serum	CLIA
FT3	Serum	CLIA
FT4	Serum, heparin plasma, EDTA plasma	CLIA
Gentamicin	Serum, EDTA plasma	Fluoreszenzpolarisation
HCG (total)	Serum	CLIA
Holotranscobalamin	Serum	Chemilumineszenz
IGF (Somatomedin C)	Serum	CLIA
Insulin	Serum	CLIA
Luteotropic hormone, LH	Serum	CLIA
Methadone as EDDP	Urine	ELISA (CEDIA)
NSE	Serum, CSF	CLIA
Opiates	Urine	ELISA (CEDIA)
Ostasis	Serum	CLIA
Pancreatic elastase	Stool	ELISA
Parathyroid hormone	Serum, heparin plasma, EDTA plasma	CLIA
Progesterone	Serum	CLIA
Prolactin	Serum	CLIA
PSA, free PSA	Serum	CLIA
Renin	EDTA plasma	CLIA
SHBG	Serum, lithium heparin plasma	CLIA
Somatotropic hormone (Human growth hormone)	Serum	CLIA
$\beta$ 2 microglobulin	Serum, heparin plasma, EDTA plasma, citrated plasma	CLIA
Testosterone	Serum, heparin plasma, EDTA plasma	CLIA
Troponin I Ultra Highly Sensitive	Serum, heparin plasma	CLIA
TSH	Serum	CLIA
TSH receptor AK (TSI)	Serum	CLIA
Vitamin B12	Serum, heparin plasma	CLIA
Vitamin D	Serum, heparin plasma, EDTA plasma	CLIA

**Type of examination:****Microscopy**<sup>[Flex B]</sup>

Analyte(measurement parameter)	Test material (matrix)	Test technique
Blood cells - leukocytes - erythrocytes	Cerebral spinal fluid (CSF)	Microscopic chamber count
Blood cells - monocytes - lymphocytes - granulocytes - leukocyte precursors - eosinophils - basophils - normoblasts - erythrocytes - platelets - CSF cells	EDTA blood, CSF	Microscopic assessment of a stained blood smear or a cytocentrifugate (Pappenheim stain)
Differential cell picture	CSF, bronchoalveolar lavage	Microscopic assessment of a stained blood smear or a cytocentrifugate (Pappenheim stain)

**Type of examination:****Spectrometry (Inductively coupled plasma / mass spectrometry (ICP/MS))**<sup>[Flex C]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
Aluminium	Urine	ICPMS
Antimony	Urine, Serum	ICPMS
Arsenic	Urine, Serum	ICPMS
Bismuth	Serum	ICPMS
Lead	Urine, Serum, EDTA-Plasma	ICPMS
Cadmium	Urine, Serum, EDTA-Plasma	ICPMS
Calcium	Urine, Serum	ICPMS
Chrome	Urine, Serum, EDTA-Plasma	ICPMS
Iron	Urine	ICPMS
Iodine	Urine, Serum	ICPMS
Potassium	Urine	ICPMS
Cobalt	Urine	ICPMS
Copper	Urine, Serum	ICPMS
Lithium	Serum	ICPMS
Magnesium	Urine, EDTA-Plasma	ICPMS
Manganese	Urine, Serum	ICPMS
Molybdenum	Urine, Serum	ICPMS
Nickel	Urine	ICPMS
Nickel	Serum	ICPMS
Palladium	Urine	ICPMS
Mercury	Urine	ICPMS
Selenium	Urine, Serum, EDTA-Plasma	ICPMS
Thallium	Urine	ICPMS

Analyte (measurement parameter)	Test material (matrix)	Test technique
Vanadium	Serum	ICPMS
Zinc	Serum, EDTA-Plasma	ICPMS
Tin	Urine	ICPMS

**Type of examination:****Spectrometry (photometry)<sup>[Flex C]</sup>**

Analyte (measurement parameter)	Test material (matrix)	Test technique
ACE	Serum	Photometry
Albumin	Serum, heparin plasma, EDTA plasma	Photometry
Alkaline phosphatase	Serum, lithium heparin plasma	Photometry
Ammonia	EDTA plasma	Photometry
Amylase	Serum, heparin plasma, urine	Photometry
Antithrombin	Citrated plasma	Photometry
Total bilirubin, direct and indirect	Serum, heparin plasma	Photometry
Calcium	Serum, lithium heparin plasma	Photometry
Calcium	Serum, Urine	Flame photometry
Cholesterol	Serum, heparin plasma	Photometry
Cholinesterase CHE	Serum, heparin plasma	Photometry
Creatinine	Serum, lithium heparin plasma	Photometry
Creatinine	Urine	Photometry
Creatine kinase CK	Serum, lithium heparin plasma	Photometry
Creatine kinase CK-MB	Serum, heparin plasma, EDTA plasma	Photometry
Iron	Serum, lithium heparin plasma	Photometry
Ethanol	Serum / EDTA plasma / urine	Photometry
Gamma-GT	Serum, lithium heparin plasma	Photometry
Total protein	Serum, lithium heparin plasma	Photometry
Total protein	Urine, CSF	Photometry
GLDH	Serum, heparin plasma, EDTA plasma	Photometry
Glucose	Serum, NaF plasma, fluoride citrated plasma, lithium heparin plasma, urine, CSF	Photometry
GOT	Serum, lithium heparin plasma	Photometry
GPT	Serum, lithium heparin plasma	Photometry
Haemoglobin	EDTA blood	Photometry
Uric acid	Serum, lithium heparin plasma, urine	Photometry
Urea	Serum, lithium heparin plasma, urine	Photometry
HBDH	Serum, heparin plasma, EDTA plasma	Photometry
HDL cholesterol	Serum, heparin plasma, EDTA plasma	Photometry

Analyte (measurement parameter)	Test material (matrix)	Test technique
Lactate	NaF plasma, fluoride citrated plasma, lithium heparin plasma, EDTA plasma, CSF	Photometry
LDH	Serum, lithium heparin plasma	Photometry
LDL (direct measurement) + calculation	Serum, lithium heparin plasma	Photometry
Lipase	Serum, lithium heparin plasma	Photometry
Lithium	Serum	Flame photometry
Magnesium	Serum, lithium heparin plasma	Photometry
Phosphate, inorganic	Serum, lithium heparin plasma, urine	Photometry
Protein C activity	Citrated plasma	Photometry
Triglyceride	Serum, lithium heparin plasma	Photometry

**Type of examination:****qualitative examination with visual evaluation** <sup>[Flex B]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
hCG detection (qualitative)	Urine	Test strip method (manual)
pH value	Urine	Colour change

**Medical laboratory fields: Immunology****Type of examination:****Flow cytometry** <sup>[Flex C]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
T lymphocyte populations, B lymphocytes, NK cells	EDTA-blood	Flow cytometry

**Type of examination:****Electrophoresis** <sup>[Flex B]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
Oligoclonal IgG	Serum, CSF	isoelectric focusing and immunofixation electrophoresis

**Type of examination:****Ligand assays**<sup>[Flex C]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
Anti-CCP	Serum, EDTA plasma, lithium heparin	Chemilumineszenz
Auto Antibodies against: DFS70	Serum, heparin plasma, EDTA plasma, citrated plasma	ELISA
Auto Antibodies against: Glomerular basement membrane	Serum, plasma (all additives)	FEIA
Auto Antibodies against: Histones	Serum, heparin plasma, EDTA plasma, citrated plasma	ELISA
Auto Antibodies against: Hu, Yo, Ri, Ma2, Ma1, Amphiphysin, CV2, SOX1, Tr(DNER), Zic4	Serum	Immunoblot
Auto Antibodies against: Intrinsic factor	Serum, plasma (all additives)	FEIA
Auto Antibodies against: Jo-1	Serum, plasma (all additives)	FEIA
Auto Antibodies against: Lactoferrin, BPI, Cathepsin G, Elastase	Serum, EDTA plasma	ELISA
Auto Antibodies against: LKM	Serum, heparin plasma, EDTA plasma, citrated plasma	ELISA
Auto Antibodies against: M2	Serum, plasma (all additives)	FEIA
Auto Antibodies against: Myeloperoxidase	Serum, plasma (all additives)	FEIA
Auto Antibodies against: nDNS	Serum, plasma (all additives)	FEIA
Auto Antibodies against: nRNP	Serum, plasma (all additives)	FEIA
Auto Antibodies against: Nucleosomes	Serum, heparin plasma, EDTA plasma, citrated plasma	ELISA
Auto Antibodies against: Parietal cells	Serum, plasma (all additives)	FEIA
Auto Antibodies against: Proteinase 3	Serum, plasma (all additives)	FEIA
Auto Antibodies against: Scl-70	Serum, plasma (all additives)	FEIA
Auto Antibodies against: SLA/LP	Serum, heparin plasma, EDTA plasma, citrated plasma	ELISA
Auto Antibodies against: Sm	Serum, plasma (all additives)	FEIA
Auto Antibodies against: SSA 60	Serum, plasma (all additives)	FEIA
Auto Antibodies against: SSB	Serum, plasma (all additives)	FEIA
Auto Antibodies against: ssDNA	Serum, plasma (all additives)	FEIA
Beta amyloid	Cerebral spinal fluid (CSF)	ELISA
Calprotectin	Stool	CLIA
Calprotectin	Serum	FEIA
Cardiolipin IgG, IgM antibodies	Serum, plasma (all additives)	FEIA
Extractable nuclear Antibodies	Serum, plasma (all additives)	FEIA
GAD	Serum	ELISA
Ganglioside IgG & IgM	Serum	Immunoblot
Gliadin IgG/IgA Antibodies	Serum, plasma (all additives)	FEIA
IA2AK	Serum	ELISA

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Analyte (measurement parameter)	Test material (matrix)	Test technique
IgE specific	Serum, plasma (all additives)	FEIA
IgE, total	Serum, plasma (all additives)	FEIA
IgG specific	Serum, plasma (all additives)	FEIA
Interleukin-2 receptor, (sol.)	Serum	CLIA
Phospho-tau	Cerebral spinal fluid (CSF)	ELISA
Rheumatoid factor IgA, IgM	Serum, plasma (all additives)	FEIA
Thyroid Ab TPO/TAK	Serum, heparin plasma, EDTA plasma	CLIA
Tau protein	Cerebral spinal fluid (CSF)	ELISA
Transglutaminase IgA/IgG Antibodies	Serum, plasma (all additives)	FEIA
Tryptase	Serum	FEIA
TSH receptor Antibodies	Serum, heparin plasma, EDTA plasma	CLIA
$\beta$ 2-Glycoprotein I IgG and IgM	Serum, EDTA plasma, citrated plasma	FEIA

**Type of examination:****Spectrometry (Turbidimetry)<sup>[Flex B]</sup>**

Analyte (measurement parameter)	Test material (matrix)	Test technique
Albumin	CSF, serum, Urine	Turbidimetry
Alpha-1 antitrypsin	Serum, heparin plasma, EDTA plasma	Turbidimetry
C3 complement	Serum	Turbidimetry
C4 complement	Serum	Turbidimetry
Ceruloplasmin	Serum, heparin plasma	Turbidimetry
Cystatin C	Serum, heparin plasma, EDTA plasma	Turbidimetry
Free light chains Kappa	Serum, heparin plasma, EDTA plasma	Turbidimetry
Free light chains Lambda	Serum, heparin plasma, EDTA plasma	Turbidimetry
Haptoglobin	Serum, heparin plasma, EDTA plasma	Turbidimetry
IgA	Serum, lithium heparin plasma	Turbidimetry
IgA	CSF, serum	Turbidimetry
IgG	Serum, lithium heparin plasma	Turbidimetry
IgG	CSF, serum	Turbidimetry
IgG1	Serum, heparin plasma, EDTA plasma	Turbidimetry
IgG2	Serum, heparin plasma, EDTA plasma	Turbidimetry
IgG3	Serum, heparin plasma, EDTA plasma	Turbidimetry
IgG4	Serum, heparin plasma, EDTA plasma	Turbidimetry

Analyte (measurement parameter)	Test material (matrix)	Test technique
IgM	Serum, heparin plasma, EDTA plasma	Turbidimetry
IgM	CSF, serum	Turbidimetry
Soluble transferrin receptor	Serum	Turbidimetrie
STFR ferritin	Serum	Turbidimetrie

**Type of examination:****Microscopy**<sup>[Flex B]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
ANA	Serum, EDTA plasma	IIF
Anti-mitochondrial Ab	Serum, EDTA plasma	IIF
Auto Antibodies against: Actin	Serum, EDTA plasma	IIF
Auto Antibodies against: ANCA	Serum, EDTA plasma	IIF
Auto Antibodies against: Endomysium	Serum, EDTA plasma	IIF
Auto Antibodies against: smooth muscles	Serum, EDTA plasma	IIF
Auto Antibodies against: Hu, Yo, Ri	Serum, EDTA plasma	IIF
Auto Antibodies against: iDNS	Serum, EDTA plasma	IIF

**Medical laboratory fields: Human genetics (cytogenetics)****Type of examination:****Chromosome analysis**<sup>[Flex C]</sup>

Analyte (measurement parameter)	Examination material (input material; test material if necessary)	Test technique
constitutional chromosome set (detection of numerical and structural chromosome aberrations)	Heparinized peripheral blood	Chromosome banding analysis
constitutional chromosome set (detection of numerical and structural chromosome aberrations)	Heparinized peripheral blood, buccal swabs	Fluorescence in situ hybridization (FISH) on fixed native cells (interphases) or cultured cells (metaphases)
constitutional chromosome set (detection of chromosomal imbalances)	EDTA blood; DNA	Comparative genome hybridization to oligonucleotide arrays
Hemizygous set of chromosomes in germ cells	Ejaculate	Fluorescence in situ hybridization (FISH) on decondensed sperm

## Medical laboratory fields: Human genetics (molecular human genetics)

### Type of examination:

#### Molecular biological examinations<sup>[Flex C]</sup>

Analyte (measurement parameter)	Examination material (input material; test material if necessary)	Test technique
Adenomatous polyposis (APC [MIM*611731], MUTYH [MIM*604933])	EDTA blood; DNA	Sequence capture, Sequencing-by-synthesis; customer pipeline
Adrenoleukodystrophy (ABCD1 [MIM*300371])	EDTA blood; DNA	Sequence capture, Sequencing-by-synthesis; customer pipeline
AFG3L2	EDTA blood; DNA	PCR+SPCR+Sanger sequencing + MLPA
Alpha1 antitrypsin genotyping - Genotyping S-Allel and Z-Allel (OMIM#618620)	EDTA blood; DNA	Fluorescence-labelled hybridization probes (real-time PCR)
APC	EDTA blood; DNA	PCR+Sanger sequencing + MLPA
ATL1 (SPG3A)	EDTA blood; DNA	PCR+Sanger sequencing+ MLPA
ATM	EDTA blood; DNA	PCR+Sanger sequencing+ MLPA
ATP7B	EDTA blood; DNA	PCR+Sanger sequencing + MLPA
Azoospermia factor (y-chromosome microdeletions)	EDTA blood; DNA	Allele-specific PCR with size-specific DNA fragment analysis in agarose gel
bcr/abl chromosome translocation t(9;22)	EDTA blood; DNA	Fluorescence-labelled hybridization probes (real-time PCR)
BMPR1A	EDTA blood; DNA	PCR+Sanger sequencing+ MLPA
BRCA1 gene	EDTA blood; DNA	PCR+Sanger sequencing+ MLPA
BRCA2 gene	EDTA blood; DNA	PCR+Sanger sequencing+ MLPA
BRIP1	EDTA blood; DNA	PCR+Sanger sequencing+ MLPA
BSDL2 (SPG17)	EDTA blood; DNA	PCR+Sanger sequencing
CDH1	EDTA blood; DNA	PCR+Sanger sequencing
CHEK2	EDTA blood; DNA	PCR+Sanger sequencing
CYP21A2 gene	EDTA blood; DNA	PCR+Sanger sequencing, MLPA
CYP7B1 (SPG5a)	EDTA blood; DNA	PCR+Sanger sequencing

Analyte (measurement parameter)	Examination material (input material; test material if necessary)	Test technique
Cystic fibrosis (CFTR [MIM*602421])	EDTA blood; DNA	Sequence capture, Sequencing-by-synthesis; customer pipeline
DMD gene (DMD/BMD Dup/Del)	EDTA blood; DNA	PCR+MLPA
DMPK gene (MD1, Repeat)	EDTA blood; DNA	PCR+fragment analysis
ENG	EDTA blood; DNA	PCR+Sanger sequencing + MLPA
Hereditary nonpolyposis colon cancer (HNPCC), Lynch syndrome (MSH2 [MIM*609309], MSH6 [MIM*600678], MLH1 [MIM*120436], PMS2 [MIM*600259], EPCAM [MIM*185535])	EDTA blood; DNA	Sequence capture, Sequencing-by-synthesis; customer pipeline
Exon 14 skipping in the DPD gene	EDTA blood; DNA	Fluorescence-labelled hybridization probes (real-time PCR)
Factor II gene (G20210A) in hereditary thrombophilia	EDTA blood; DNA	Fluorescence-labelled hybridization probes (real-time PCR)
Factor V gene (G1691A) in hereditary thrombophilia	EDTA blood; DNA	Fluorescence-labelled hybridization probes (real-time PCR)
familial breast cancer: ATM (OMIM 607585), BRCA1 (OMIM 133705), BRCA2 (OMIM 600185), BRIP1 (OMIM 605882), CDH1 (OMIM 192090), CHEK2 (OMIM 604373), NBN (OMIM 602667), PALB2 (OMIM 610355), PTEN (OMIM 601728), RAD51C (OMIM 602774), RAD51D (OMIM 602954), STK11 (OMIM 602216), TP53 (OMIM 191170)	EDTA blood; DNA	Sequence capture, Sequencing-by-synthesis; customer pipeline
FGF14	EDTA blood; DNA	PCR+Sanger sequencing
FMR1 gene (FRAXA, FXTAS, POI, Repeat)	EDTA blood; DNA	PCR+repeat analysis
FXN gene (FRDA, Repeat)	EDTA blood; DNA	PCR+fragment analysis
HFE genotyping (C282Y, H63D) in hereditary hemochromatosis	EDTA blood; DNA	Fluorescence-labelled hybridization probes (real-time PCR)
HLA -B*27 genotyping	EDTA blood; DNA	Melting point analysis of the amplification products with SYBR Green
HLA-B*5701	EDTA blood; DNA	Allele-specific PCR with size-specific DNA fragment analysis in agarose gel
HSPD1 (SPG13)	EDTA blood; DNA	PCR+Sanger sequencing

Analyte (measurement parameter)	Examination material (input material; test material if necessary)	Test technique
HTT gene (HD, Repeat)	EDTA blood; DNA	PCR+fragment analysis
ITPR1	EDTA blood; DNA	PCR+Sanger sequencing
KCNC3	EDTA blood; DNA	PCR+Sanger sequencing
KIAA0196 (SPG8)	EDTA blood; DNA	PCR+Sanger sequencing
KIAA1840 (SPG11)	EDTA blood; DNA	PCR+Sanger sequencing + MLPA
KIF5A (SPG10)	EDTA blood; DNA	PCR+Sanger sequencing
colorectal carcinoma (APC [MIM*611731], BMPR1A [MIM*601299], CDH1 [MIM*192090], CHEK2 [MIM*604373], ENG [MIM*131195], EPCAM [MIM*185535], MLH1 (MIM*120436), MSH2 [MIM*609309], MSH6 [MIM*600678], MUTYH [MIM*604933], PMS2 [MIM*600259], PTEN [MIM*601728], SMAD4 [MIM*600993], STK11 [MIM*602216])	EDTA blood; DNA	Sequence capture, Sequencing-by-synthesis; customer pipeline
Congenital/Cyclic Neutropenia (ELANE [MIM*185535])	EDTA blood; DNA	Sequence capture, Sequencing-by-synthesis; customer pipeline
MEFV gene	EDTA blood; DNA	PCR+sequencing
MLH1 gene	EDTA blood; DNA	PCR+sequencing + MLPA
Wilson's disease (ATP7B [MIM*606882])	EDTA blood; DNA	Sequence capture, Sequencing-by-synthesis; customer pipeline
MSH2 gene	EDTA blood; DNA	PCR+sequencing + MLPA
MSH6 gene	EDTA blood; DNA	PCR+sequencing + MLPA
Mutations in the CFTR gene; Cystic fibrosis (mucoviscidosis)	EDTA blood; DNA	Amplification Refractory Mutation System (ARMS)
MUTYH	EDTA blood; DNA	PCR+Sanger sequencing + MLPA
MVK gene	EDTA blood; DNA	PCR+sequencing
N-acetyltransferase 2 (NAT2) gene polymorphism	EDTA blood; DNA	Fluorescence-labelled hybridization probes (real-time PCR)
NIPA1 (SPG6)	EDTA blood; DNA	PCR+Sanger sequencing + MLPA
NLRP3	EDTA blood; DNA	PCR+Sanger sequencing
NOTCH3	EDTA blood; DNA	PCR+Sanger sequencing

Analyte (measurement parameter)	Examination material (input material; test material if necessary)	Test technique
NPC1	EDTA blood; DNA	PCR+Sanger sequencing + MLPA
NPC2	EDTA blood; DNA	PCR+Sanger sequencing + MLPA
PaI (4G/5G) polymorphism	EDTA blood; DNA	Fluorescence-labelled hybridization probes (real-time PCR)
PALB2	EDTA blood; DNA	PCR+Sanger sequencing + MLPA
PGN (SPG7)	EDTA blood; DNA	PCR+Sanger sequencing + MLPA
PLEKHG4	EDTA blood; DNA	PCR+Sanger sequencing
PMP22-Gen	EDTA blood; DNA	PCR+Sanger sequencing + MLPA
PMS2	EDTA blood; DNA	PCR+Sanger sequencing + MLPA
Polymorphic variants (M1,T1) of the GST gene	EDTA blood; DNA	Allele-specific PCR with size-specific DNA fragment analysis in agarose gel
Polymorphic variants (P1) of the GST gene	EDTA blood; DNA	Fluorescence-labelled hybridization probes (real-time PCR)
Primary (hereditary) lactose intolerance	EDTA blood; DNA	Fluorescence-labelled hybridization probes (real-time PCR)
PRKCG	EDTA blood; DNA	PCR+Sanger sequencing
PTEN	EDTA blood; DNA	PCR+Sanger sequencing + MLPA
RAD51C	EDTA blood; DNA	PCR+Sanger sequencing + MLPA
RAD51D	EDTA blood; DNA	PCR+Sanger sequencing + MLPA
REEP1 (SPG31)	EDTA blood; DNA	PCR+Sanger sequencing + MLPA
SHOX	EDTA blood; DNA	PCR+Sanger sequencing + MLPA
SLC6A4 genotyping	EDTA blood; DNA	Fluorescence-labeled hybridization probes (real-time PCR) and size-specific DNA fragment analysis in agarose gel
SMAD4	EDTA blood; DNA	PCR+Sanger sequencing + MLPA
SMN1 gene, (SMA, Del)	EDTA blood; DNA	PCR+MLPA
SPAST (SPG4)	EDTA blood; DNA	PCR+Sanger sequencing + MLPA
SPINK1	EDTA blood; DNA	PCR+Sanger sequencing + MLPA
SPTBN2	EDTA blood; DNA	PCR+Sanger sequencing
STK11	EDTA blood; DNA	PCR+Sanger sequencing + MLPA
Superoxide dismutase 2 polymorphism (Ala16Val)	EDTA blood; DNA	Fluorescence-labelled hybridization probes (real-time PCR)
TNFRSF1A gene	EDTA blood; DNA	PCR+sequencing
TP53	EDTA blood; DNA	PCR+Sanger sequencing + MLPA

Analyte (measurement parameter)	Examination material (input material; test material if necessary)	Test technique
TPMT - Genotyping	EDTA blood; DNA	Fluorescence-labelled hybridization probes (real-time PCR)
TTBK2	EDTA blood; DNA	PCR+Sanger sequencing
VHL	EDTA blood; DNA	PCR+Sanger sequencing + MLPA
ZFYVE26 (SPG15)	EDTA blood; DNA	PCR+Sanger sequencing
ZFYVE27 (SPG33)	EDTA blood; DNA	PCR+Sanger sequencing

## Medical laboratory fields: Microbiology

### Type of examination:

#### Agglutination tests<sup>[Flex B]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
Staphylococcal ab (Anti-staphylolysin titre)	Serum	Direct agglutination
Haemophilus influenzae capsule type B	Pure culture isolates	Gruber agglutination
VDRL	Serum, EDTA plasma	Direct agglutination

### Type of examination:

#### Chromatography (immunochromatography (IC))<sup>[Flex B]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
MRSA (PBP2a)	Pure culture isolates	Immunochromatography

### Type of examination:

#### Susceptibility testing of bacteria, fungi<sup>[Flex B]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
Aerobic and facultative anaerobic fast-growing bacteria	Pure culture isolates	Agar diffusion, carrier-board gradient diffusion
Aerobic and facultative anaerobic fast-growing bacteria	Pure culture isolates	Broth dilution method as minimum inhibitory concentration (MIC)/break point
Anaerobic bacteria	Pure culture isolates	carrier-board gradient diffusion
Beta lactamase former	Pure culture isolates	Biochemical reaction to carrier substance with antibiotics
Candida spp.	Pure culture isolates	Broth dilution method as minimum inhibitory concentration (MIC)/break point

Analyte (measurement parameter)	Test material (matrix)	Test technique
ESBL	Pure culture isolates	Broth dilution method as minimum inhibitory concentration (MIC)/break point, agar diffusion
MRGN	Pure culture isolates	Broth dilution method as minimum inhibitory concentration (MIC)/break point, agar diffusion
MRSA	Pure culture isolates	Broth dilution method as minimum inhibitory concentration (MIC)/break point, agar diffusion
VRE	Pure culture isolates	Broth dilution method as minimum inhibitory concentration (MIC)/break point, agar diffusion

**Type of examination:****Germ identification**<sup>[Flex B]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
Bacteria, fungi	Culture	mass spectrometric pathogen differentiation (MALDI-TOF-MS)
Bacteria, fungi	Culture	Biochemically complex
Sprout cells, dermatophytes, moulds	Culture	Microscopy

**Type of examination:****Cultural examinations**<sup>[Flex B]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
Aerobic and facultatively anaerobic growing bacteria	Body fluids, smears, aspirates, tissue	Cultivation specific and non-specific, partly: CO <sub>2</sub> -enriched, aerobic, micro-aerobic atmosphere, temperature dependent
Anaerobic bacteria	Body fluids, smears, aspirates, tissue	Cultivation specific and non-specific, anaerobic atmosphere
Blood cultures	Blood cultures, aspirates, CSF	Fully mechanized blood culture process
Inhibitors of bacterial growth <i>oder</i> Detection of bacterial growth-inhibiting substances (inhibitors)	body fluids	inhibition of growth of Bacillus spores (inhibitor detection test)

Analyte (measurement parameter)	Test material (matrix)	Test technique
Mycobacteria	resp. material, urine, stool, punctate, tissue	Cultivation specific
Sprout cells, dermatophytes and moulds	Body fluids, smears, aspirates, tissue	Cultivation specific and non-specific, temperature dependent

**Type of examination:****Ligand assays**<sup>[Flex B]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
Bordetella pertussis toxin IgG	Serum, heparin plasma, EDTA plasma, citrated plasma	ELISA
Borrelia burgdorferi IgG/ IgM	Serum, EDTA plasma	Immunoblot
Borrelien IgG-, IgM Antibodies	Serum, heparin plasma, EDTA plasma, citrated plasma	ELISA
Borrelien IgG/IgM Antibodies	CSF and serum	ELISA
Campylobacter IgA Antibodies	Serum, heparin plasma, EDTA plasma, citrated plasma	ELISA
Chlamydia pneumoniae IgG-, IgA Antibodies	Serum	ELISA
Chlamydia trachomatis IgG-, IgA Antibodies	Serum	ELISA
Clostridioides difficile GDH and toxin	Stool	CLIA
Diphtheria - Antibodies	Serum, heparin plasma, EDTA plasma, citrated plasma	ELISA
Helicobacter pylori antigen	Stool	CLIA
Legionella	Urine	Immunofluorescence
Lues- IgG-, IgM Antibodies	Serum, heparin plasma, EDTA plasma, citrated plasma, CSF	ELISA
Mycoplasma pneumoniae IgG, IgA, IgM Antibodies	Serum, heparin plasma, EDTA plasma, citrated plasma	ELISA
Tetanus Antitoxin IgG	Serum, heparin plasma, EDTA plasma, citrated plasma	ELISA
Toxoplasrose IgG- and IgM Antibodies	Serum, heparin plasma, EDTA plasma	CLIA
Treponema pallidum IgG/IgM	Serum, EDTA plasma	Immunoblot
Treponema	Serum, heparin plasma, EDTA plasma, citrated plasma	CLIA
Yersinien IgG-, IgA Antibodies	Serum, EDTA plasma	Immunoblot

**Type of examination:****Microscopy**<sup>[Flex B]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
Bacteria	Body fluids, smears, aspirates, tissue	Bright field microscopy after staining with dyes
Mycobacteria	resp. Material	Bright field microscopy after staining with dyes
Parasites	Stool, cellophane tape imprint	Bright field microscopy without and after staining with dyes
Plasmodium spec. (Malaria)	EDTA blood, capillary blood	Microscopy
Sprout cells, dermatophytes and moulds	Isolate in pure culture	Bright field microscopy without and after staining with dyes

**Type of examination:****Molecular biological examinations**<sup>[Flex B]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
16s rDNA sequencing	Bacterial colonies on agar plates, bacterial suspension	PCR, sequencing
18s rDNA sequencing	Fungal colonies on agar plates, fungal suspension	PCR, sequencing
B. pertussis/parapertussis	Swab, BAL	isothermal amplification
Chlamydia trachomatis and Neisseria gonorrhoeae DNA, qualitative	Swab, urine	Nucleic acid amplification with parallel detection of amplicons via probe hybridization
Chlamydomydia pneumoniae and Mycoplasma pneumoniae DNA qualitative	Smear, tracheal secretion, BAL	Nucleic acid amplification with parallel detection of amplicons via probe hybridization
Gastro bacteria (Campylobacter, Salmonella, Shigella, Yersinia, Clostridium difficile, E.coli O157, STEC(STx1/2))	stool	Real time PCR
Methicillin Resistant S. aureus (MRSA) DNA Qualitative	Smear	Nucleic acid amplification with parallel detection of amplicons via probe hybridization
Mycobacterium tuberculosis complex and rifampicin-mediated mutation in the rpoB gene	Sputum, BAL, CSP, culture material	Nucleic acid amplification with parallel detection of amplicons via probe hybridization
Mycobacterium tuberculosis complex	respiratory materials, culture	PCR/ probe melting point determination

Analyte (measurement parameter)	Test material (matrix)	Test technique
Periodontal pathogen DNA qualitative	Paper point from gingival pocket	Nucleic acid amplification Detection of amplicons via solid phase probe hybridization
Pneumocystis jirovecii	Smear, tracheal secretion, BAL	Nucleic acid amplification with parallel detection of amplicons via probe hybridization
Sexually-transmitted infections (STI): Chlamydia trachomatis, N. gonorrhoeae, T.vaginalis, U.urealyticum, U.parvum, M.hominis, M.genitalium	Smear, urine	Nucleic acid amplification with parallel detection of amplicons via probe hybridization

**Type of examination:****Qualitative examinations (simple) with visual evaluation** <sup>[Flex A]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
Differentiation of catalase-positive / catalase-negative bacteria	Single colony	biochemically orienting (catalase)
Differentiation of coagulase-positive / coagulase-negative bacteria	Single colony	biochemically simple (coagulase)
Differentiation of oxidase-positive / oxidase-negative bacteria	Single colony	biochemically orienting (oxidase)

**Type of examination:****Spectrometry (Turbidimetry)** <sup>[Flex B]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
Streptococcal ab (Anti-streptolysin titre)	Serum, heparin plasma, EDTA plasma	Turbidimetry

**Type of examination:****Cell function tests** <sup>[Flex B]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
Release of IFNg after stimulation with <i>M. tuberculosis</i> antigens	Blood in Li-Heparin tubes	Cytokine release, measurement of cytokine by ELISA

## Medical laboratory fields: Virology

### Type of examination:

#### Ligand assays<sup>[Flex C]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
Adenovirus AG	Stool	ELISA
Adenovirus IgG/IgA Antibodies	Serum, heparin plasma, EDTA plasma, citrated plasma	ELISA
CMV IgG/IgM Antibodies	Serum, heparin plasma, EDTA plasma, citrated plasma	CLIA
Coxsackie IgG, IgA Antibodies	Serum, heparin plasma, EDTA plasma, citrated plasma	ELISA
EBV: EBNA IgG Antibodies	Serum, heparin plasma, EDTA plasma, citrated plasma	ELISA
EBV: VCA IgG Antibodies	Serum, heparin plasma, EDTA plasma, citrated plasma	ELISA
EBV: VCA IgM Antibodies	Serum, heparin plasma, EDTA plasma, citrated plasma	ELISA
HBe antigen	Serum, lithium heparin plasma, sodium heparin plasma, EDTA plasma	CLIA
Hepatitis A Antibodies	Serum, lithium heparin plasma, sodium heparin plasma, EDTA plasma	CLIA
Hepatitis A IgM	Serum, lithium heparin plasma, sodium heparin plasma, EDTA plasma	CLIA
Hepatitis B HBsAg confirmatory test	Serum, lithium heparin plasma, sodium heparin plasma, EDTA plasma	CLIA
Hepatitis B HBc Antibodies	Serum, EDTA plasma	CLIA
Hepatitis B HBc IgM	Serum, lithium heparin plasma, sodium heparin plasma, EDTA plasma	CLIA
Hepatitis B HBe Antibodies	Serum, lithium heparin plasma, sodium heparin plasma, EDTA plasma	CLIA
Hepatitis B HBsAg	Serum, lithium heparin plasma, sodium heparin plasma, EDTA plasma	CLIA
Hepatitis B HBs Antibodies	Serum, lithium heparin plasma, sodium heparin plasma, EDTA plasma	CLIA
Hepatitis C Antibodies	Serum, lithium heparin plasma, sodium heparin plasma, EDTA plasma	CLIA
Hepatitis C	Serum, EDTA plasma	recombinant immunoblot

Analyte (measurement parameter)	Test material (matrix)	Test technique
HIV (1/2- Antibodies, p24 Ag)	Serum, EDTA plasma	CLIA
HSV 1/2-IgG Antibodies	CSF, serum	ELISA
Measles IgG/IgM Antibodies	Serum, heparin plasma, EDTA plasma, citrated plasma	ELISA
Measles IgG Antibody Index	CSF, serum	ELISA
Mumps IgG/IgM Antibodies	Serum, heparin plasma, EDTA plasma, citrated plasma	ELISA
Parvovirus B19 IgG/IgM Ab.	Serum, heparin plasma, EDTA plasma, citrated plasma	ELISA
Rotavirus AG	Stool	ELISA
Rubella IgG/IgM Antibodies	Serum, heparin plasma, EDTA plasma	CLIA
VZV IgG/IgA/IgM Antibodies	Serum, heparin plasma, EDTA plasma, citrated plasma	ELISA
VZV IgG Antibodies	CSF, serum	ELISA

**Type of examination:****Molecular biological examinations<sup>[Flex B]</sup>**

Analyte (measurement parameter)	Test material (matrix)	Test technique
CMV-DNA qualitative	EDTA blood, sputum, urine, CSF	Nucleic acid amplification with parallel detection of amplicons via probe hybridization
EBV DNA qualitative	EDTA blood, sputum, CSF, BAL, savia	Nucleic acid amplification with parallel detection of amplicons via probe hybridization
Enteroviruses	CSF	Nucleic acid amplification with parallel detection of amplicons via probe hybridization
Gastro-Virus: Norovirus I+II, Adeno-, Rota-, Astro-, Sapovirus	Stool	Nucleic acid amplification with parallel detection of amplicons via probe hybridization
HBV DNA qualitative and quantitative	EDTA plasma, citrate plasma, serum	Nucleic acid amplification with parallel detection of amplicons via probe hybridization
HCV RNA qualitative	EDTA plasma, citrate plasma, serum	Nucleic acid amplification with parallel detection of amplicons via TaqMan probe hybridization

Analyte (measurement parameter)	Test material (matrix)	Test technique
HCV RNA qualitative & quantitative	EDTA plasma, citrated plasma, serum	Nucleic acid amplification with parallel detection of amplicons via TaqMan probe hybridization
HCV genotyping	EDTA plasma, citrated plasma, serum	Nested-PCR, Sanger sequencing Seq. in 5'NCR
HIV-1 resistance determination, genotypic	EDTA plasma	Nested PCR Sanger sequencing
HIV-1 RNA qualitative & quantitative	EDTA plasma, citrated plasma	Nucleic acid amplification with parallel detection of amplicons via TaqMan probe hybridization
HIV-1/HIV-2 RNA qualitative	EDTA plasma, serum	Real-Time PCR = Nucleic acid amplification with parallel detection of amplicons via TaqMan probe hybridization
HSV DNA qualitative	CSF, smear	Nucleic acid amplification with parallel detection of amplicons via probe hybridization
Human Papilloma Virus	Smear	Nucleic acid amplification with parallel detection of amplicons via probe hybridization
Influenza A+B RSV	Swabs, BAL, tracheal secretions	Nucleic acid amplification with parallel detection of amplicons via TaqMan probe hybridization
Influenza A+B	Swabs, BAL, tracheal secretions	Nucleic acid amplification with parallel detection of amplicons via TaqMan probe hybridization
Norovirus	Stool	Nucleic acid amplification with parallel detection of amplicons via TaqMan probe hybridization
SARS-CoV-2 /Coronavirus qualitative	Swabs, BAL, tracheal secretions, throat rinsing water	Real-Time PCR = Nucleic acid amplification with parallel detection of amplicons via TaqMan probe hybridization
VZV-DNA qualitative	CSF, swab	Nucleic acid amplification with parallel detection of amplicons via probe hybridization

## Medical laboratory field: Transfusion medicine

### Type of examination:

#### Agglutination tests<sup>[Flex B]</sup>

Analyte (measurement parameter)	Test material (matrix)	Test technique
Antibody differentiation	Native whole blood, EDTA whole blood	Gel centrifugation method
direct Coombs test	Native whole blood, EDTA whole blood	Gel centrifugation method
indirect Coombs test	Native whole blood, EDTA whole blood	Gel centrifugation method, manual procedure
Blood group determination ABO-System	Native whole blood, EDTA whole blood	Gel centrifugation method
Rh formula	Native whole blood, EDTA whole blood	Gel centrifugation method
Kell antigen	Native whole blood, EDTA whole blood	Gel centrifugation method
Search for irregular antibodies	Native whole blood, EDTA whole blood	Gel centrifugation method, manual procedure