

Annex to the accreditation certificate: N° 1/014 According to standard ISO 15189:2012 For a medical laboratory

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Accredited organisation:

Laboratoires Réunis
Centre Langwies
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Medical Biology

Objects submitted for analysis	Characteristics or properties measured	Measurement principle and equipment	Analysis methods
(e.g. products, materials, samples, matrices, equipment)		(e.g. manual or automatic measurement)	(e.g. published, adapted, checked internally)
Flexible scope analyses *			
General domain: MED1 - Clinical Biochemistry			
Technical domain: MED1.1 - General Biochemistry			
<i>Cobas c502</i>			
Plasma	Lactate	Spectrophotometry (automated system, Cobas 8000, Roche)	Enzymatic assay
Serum	Homocystein	Spectrophotometry (automated system, Cobas 8000 Roche)	Enzymatic assay
Serum	Apolipoprotein A1	Turbidimetry (automated system, Cobas 8000, Roche)	Turbidimetric
Serum	Apolipoprotein B	Turbidimetry (automated system, Cobas 8000, Roche)	Turbidimetric
Serum	ASLO	Turbidimetry (automated system, Cobas 8000, Roche)	Turbidimetric
Serum	Haptoglobin	Turbidimetry (automated system, Cobas 8000, Roche)	Turbidimetric
Serum	IgA	Turbidimetry (automated system, Cobas 8000, Roche)	Turbidimetric
Serum	IgG	Turbidimetry (automated system, Cobas 8000, Roche)	Turbidimetric
Serum	IgM	Turbidimetry (automated system, Cobas 8000, Roche)	Turbidimetric
Serum	Lipoprotein(a)	Turbidimetry (automated system, Cobas 8000, Roche)	Turbidimetric
Serum	Rheumatoid factor (RF)	Turbidimetry (automated system, Cobas 8000, Roche)	Turbidimetric
Serum	Soluble Transferrin (STFR)	Turbidimetry (automated system, Cobas 8000, Roche)	Turbidimetric
Serum	Amylase pancreatic	Spectrophotometry (automated system, Cobas 8000, Roche)	Colorimetric assay

Objects submitted for analysis	Characteristics or properties measured	Measurement principle and equipment	Analysis methods
Serum	Cholinesterase	Spectrophotometry (automated system, Cobas 8000, Roche)	Colorimetric assay
Serum	Carbamazepin	Spectrophotometry (automated system, Cobas 8000, Roche)	KIMS
Serum	Phenytoin	Spectrophotometry (automated system, Cobas 8000, Roche)	KIMS
Serum	Valproic acid	Spectrophotometry (automated system, Cobas 8000 Roche)	Enzymatic assay
Serum	Copper	Spectrophotometry (automated system, Cobas 8000, Roche)	Colorimetric assay
Serum	Prealbumin	Turbidimetry (automated system, Cobas 8000, Roche)	Turbidimetric
Urine	Micoalbumin (Micral)	Turbidimetry (automated system, Cobas 8000, Roche)	Turbidimetric
Serum	CRP high sensitive	Turbidimetry (automated system, Cobas 8000, Roche)	Turbidimetric
Serum	Alpha1-Acid Glycoprotein	Turbidimetry (automated system, Cobas 8000, Roche)	Turbidimetric
Serum	Angiotensin converting Enzym	Spectrophotometry (automated system, Cobas 8000 Roche)	Enzymatic assay
Serum	Kappa	Turbidimetry (automated system, Cobas 8000, Roche)	Turbidimetric
Serum	Lambda	Turbidimetry (automated system, Cobas 8000, Roche)	Turbidimetric
Urine	Albumin	Turbidimetry (automated system, Cobas 8000, Roche)	Turbidimetric
Serum		Turbidimetry (automated system, Cobas 8000, Roche)	Turbidimetric
Urine	Total protein	Turbidimetry (automated system, Cobas 8000, Roche)	Turbidimetric
Serum	Phenobarbital	Spectrophotometry (automated system, Cobas 8000, Roche)	KIMS
Serum	Fructosamin	Spectrophotometry (automated system, Cobas 8000, Roche)	Colorimetric assay

Objects submitted for analysis	Characteristics or properties measured	Measurement principle and equipment	Analysis methods
<i>Cobas 8000 ISE</i>			
Serum	Chloride	Electrochemical detection of ions (automated system, Cobas 8000, Roche)	ISE
Urine			
Serum	Potassium		
Urine			
Serum	Sodium		
Urine			
<i>Cobas 8000 c701</i>			
Serum	Transferrin (TF)	Turbidimetry (automated system, Cobas 8000, Roche)	Turbidimetric
Serum	CRP	Turbidimetry (automated system, Cobas 8000, Roche)	Turbidimetric
Serum	Ferritin	Turbidimetry (automated system, Cobas 8000, Roche)	Turbidimetric
Serum	Bilirubin direct	Spectrophotometry (automated system, Cobas 8000, Roche)	Colorimetric assay
Serum	Bilirubin total	Spectrophotometry (automated system, Cobas 8000, Roche)	Colorimetric assay
Serum	Calcium	Spectrophotometry (automated system, Cobas 8000, Roche)	Colorimetric assay (MN Bapta)
Urine		Spectrophotometry (automated system, Cobas 8000, Roche)	Colorimetric assay (MN Bapta)
Serum	HDL Cholesterin	Spectrophotometry (automated system, Cobas 8000, Roche)	Enzymatic (colorimetric) assay
Serum	Creatinin	Spectrophotometry (automated system, Cobas 8000, Roche)	Enzymatic assay
Urine		Spectrophotometry (automated system, Cobas 8000, Roche)	Enzymatic assay
Serum	Iron	Spectrophotometry (automated system, Cobas 8000, Roche)	Colorimetric assay
Serum	Phosphor	Spectrophotometry (automated system, Cobas 8000, Roche)	Colorimetric assay (Molybdat UV)

Objects submitted for analysis	Characteristics or properties measured	Measurement principle and equipment	Analysis methods
Urine		Spectrophotometry (automated system, Cobas 8000, Roche)	Colorimetric assay (Molybdat UV)
Serum	Amylase total	Spectrophotometry (automated system, Cobas 8000, Roche)	Colorimetric assay IFCC
Serum	AST/GOT	Spectrophotometry (automated system, Cobas 8000, Roche)	Enzymatic assay
Serum	Gamma – GT	Spectrophotometry (automated system, Cobas 8000, Roche)	Enzymatic (colorimetric) assay
Serum	LDH	Spectrophotometry (automated system, Cobas 8000, Roche)	Enzymatic assay (UV-Test)
Serum	Triglyceride	Spectrophotometry (automated system, Cobas 8000, Roche)	Enzymatic (colorimetric) assay
Serum	Urea	Spectrophotometry (automated system, Cobas 8000, Roche)	Enzymatic assay (kinetic)
Urine		Spectrophotometry (automated system, Cobas 8000, Roche)	Enzymatic assay (kinetic)
Serum	Uric acid	Spectrophotometry (automated system, Cobas 8000, Roche)	Enzymatic (colorimetric) assay
Urine		Spectrophotometry (automated system, Cobas 8000, Roche)	Enzymatic (colorimetric) assay
Serum	Magnesium	Spectrophotometry (automated system, Cobas 8000, Roche)	Colorimetric assay
Urine		Spectrophotometry (automated system, Cobas 8000, Roche)	Colorimetric assay
Serum	Cholesterin	Spectrophotometry (automated system, Cobas 8000, Roche)	Colorimetric assay IFCC
Serum	Cholesterin LDL	Spectrophotometry (automated system, Cobas 8000, Roche)	Enzymatic (colorimetric) assay
Serum	Glucose	Spectrophotometry (automated system, Cobas 8000, Roche)	Enzymatic assay

Objects submitted for analysis	Characteristics or properties measured	Measurement principle and equipment	Analysis methods
Urine		Spectrophotometry (automated system, Cobas 8000, Roche)	Enzymatic assay calculated
Serum	Alk. Phosphatase	Spectrophotometry (automated system, Cobas 8000, Roche)	Colorimetric assay
Serum	ALT/GPT	Spectrophotometry (automated system, Cobas 8000, Roche)	Enzymatic assay
Serum	Créatine kinase CK	Spectrophotometry (automated system, Cobas 8000, Roche)	Enzymatic assay (UV Test)
Serum	Lipase	Spectrophotometry (automated system, Cobas 8000, Roche)	Enzymatic (colorimetric) assay
Serum	Total Protein	Spectrophotometry (automated system, Cobas 8000, Roche)	Colorimetric assay
<i>Cobas 8000 e801</i>			
Serum	Osteocalcin	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	CK-MB	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	LH	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	FSH	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	Prolactin	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	Makroprolactin	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	Progesteron	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	HCG	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA

Objects submitted for analysis	Characteristics or properties measured	Measurement principle and equipment	Analysis methods
Serum	TSH	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	FT3	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	CEA	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	PSA total	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	PSA free	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	Alpha-Fetoprotein AFP	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	CA 125	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	CA 15-3	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	CA 19-9	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	Pro-BNP	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	Thyreoglobulin (TG)	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	PTH	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	Beta-Crosslaps	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	DHEA-S	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Plasma	ACTH	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA

Objects submitted for analysis	Characteristics or properties measured	Measurement principle and equipment	Analysis methods
Serum	Myoglobin	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	CYFRA 21-1	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	Sexual Hormone Binding Globulin (SHBG)	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	Calcitonin	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	Insulin	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	C-Peptid	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	P1NP	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	HE4	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	NSE (Neuron specific Anolase)	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	Testosteron	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	Estradiol	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	FT4	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	Folate	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	Vitamin B12	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	Cortisol	Competitive Assay (automated system, Cobas 8000, Roche)	ECLIA

Objects submitted for analysis	Characteristics or properties measured	Measurement principle and equipment	Analysis methods
Serum	Troponin T hs	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	Digoxin	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	1,25 OH Vitamin D	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	AMH (Anti-Müller Hormon)	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	Procalcitonin	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
<i>ELEC</i>			
Serum	Monoclonal proteins	Electrophoresis (IELEC, SEBIA)	Immunotyping
Serum	CDT	CAPILLARYS System	Capillary electrophoresis
Serum	Serum proteins	CAPILLARYS System	Capillary electrophoresis
<i>Cobas 8000 e602</i>			
Serum	Ionized Calcium	Electrochemical detection of ions (automated system, Electrolyte Analyzer)	ISE
<i>Chromatography</i>			
Urine	Catecholamine urinaire (Noradrenalin, Adrenalin, Dopamin)	HPLC (Agilent)	HPLC
Urine	VMA/HVA/5HIAA	HPLC (Agilent)	HPLC
Serum	Vitamine A/E	UHPLC/HPLC(Agilent)	HPLC
Urine	Serotonin	HPLC (Agilent)	HPLC
Serum		HPLC (Agilent)	HPLC
Lithium-Heparin-Plasma	Vitamine C	UHPLC/HPLC(Agilent)	HPLC
EDTA blood	Vitamine B1	UHPLC/HPLC(Agilent)	HPLC
EDTA blood	Vitamine B2	UHPLC/HPLC(Agilent)	HPLC
EDTA blood	Vitamine B6	UHPLC/HPLC(Agilent)	HPLC
<i>Stool tests</i>			
Stool	Fecal haemoglobin	Latex agglutination, (automatic, Eiken)	iFOB (iO, Eiken)

Objects submitted for analysis	Characteristics or properties measured	Measurement principle and equipment	Analysis methods
Stool	pH – determination in stool	Electrochemical analysis (manual)	Potentiometric
Stool	A1-Antitrypsin	ELISA and related immunoassays (manual test)	ELISA
Stool	slgA	ELISA and related immunoassays (manual test)	ELISA
<i>Urine</i>			
Urine	Urine status (glucose, proteins, bilirubin, pH, blood, ketone, nitrite, leukocytes, urobilinogen)	Spectrophotometry (Cobas 6500, Roche)	Colometric
<i>Liaison XL</i>			
Serum	IGF-1	ELISA and related immunoassays (automated system, Liaison/ DiaSorin)	CLIA
Stool	Calprotectin	ELISA and related immunoassays (automated system, Liaison XL / DiaSorin)	CLIA
Serum	1,25-Dihydroxy-Vitamin-D	ELISA and related immunoassays (automated system, Liaison XL / DiaSorin)	CLIA
Serum	Androstendione	ELISA and related immunoassays (automated system, Liaison XL / DiaSorin)	CLIA
Stool	Elastase	ELISA and related immunoassays (automated system, Liaison XL / DiaSorin)	CLIA
<i>ELISA</i>			
Serum	DHT	ELISA and related immunoassays (manual test)	ELISA
Serum	17-OH-Progesteron	ELISA and related immunoassays (manual test)	ELISA
Saliva	Cortisol	ELISA and related immunoassays (manual test)	ELISA
Serum	Free Testosterone	ELISA and related immunoassays (manual test)	ELISA
Technical domain: MED1.2. - Pharmacology			
Urine	Amphetamine	Chromatographic mass spectrometry (Waters)	LC-MS
Urine	Benzodiazepines		
Urine	Cannabinoides		
Urine	Cocaine		

Objects submitted for analysis	Characteristics or properties measured	Measurement principle and equipment	Analysis methods
Urine	Methadone		
Urine	Opiates		
Urine	LSD		
Urine	Methaqualon		
Urine	Phencyclidine		
Urine	Benzodiazepine	Manuell (Schnelltest)	Immunchromatographie
Urine	Barbiturate	Manuell (Schnelltest)	Immunchromatographie
Technical domain: MED1.3 – Calculated parameters			
Serum	Free androgen Index	/	/
Serum	Glomerular filtrations rate (GFR)	/	/
Serum	PSA Ratio	/	/
Serum	Iron Transferrin Saturation	/	/
Serum	LDL (Friedewald equation)	/	/
Serum	Free BIL, indirect Bilirubin	/	/
Serum	Osmolalité	/	/
Serum	Albumin-Creatinin-Ratio	/	/
Serum	Creatinin-Clearance	/	/
Urine	Potassium in 12/24h-Urine	/	/
Urine	Sodium in 12/ 24h-Urine	/	/
Urine	Chloride in 12/ 24h-Urine	/	/
Urine	Calcium in 12/ 24h-Urine	/	/
Urine	Creatinin in 12/ 24h-Urine	/	/
Urine	Phosphor in 12/ 24h-Urine	/	/
Urine	Magnesium in 12/ 24h-Urine	/	/
Urine	Protein total in 12/ 24h-Urine	/	/
Urine	Urea in 12/ 24h-Urine	/	/
Urine	Uric acid in 12/ 24h-Urine	/	/
Serum	ROMA score	/	/
Serum	Calcium adjusted	/	/
Serum	HOMA-IR	/	/
Urine	Micral / 24h	/	/
Serum	Glomerular filtration rate (MDRD - Modification of Diet in Renal Disease Studies)	/	/

Objects submitted for analysis	Characteristics or properties measured	Measurement principle and equipment	Analysis methods
Serum	URCL Urea Clearance	/	/
Serum	GFR K(kinder)	/	/
Serum	Protein Creatinin Ratio	/	/
Serum	Calcium Creatinin Ratio	/	/
Serum	PINI	/	/
Serum	GFR (CKD-EPI)	/	/
Serum	Vitamin D ratio	/	/
Serum	Kappa/Lambda Ratio	/	/
Serum	NONHDL		
Serum	Quicki Index (Quantitative Insulin Sensitivity Check Index)		
Urine	Catecholamine urinaire (Noradrenalin, Adrenalin, Dopamin) µg /24 Std	/	/
Urine	VMA/HVA/5HIAA mg/24 Std	/	/
Urine	Serotonin im Urine µg /24 Std	/	/
Urine	Catecholamine urinaire (Noradrenalin, Adrenalin, Dopamin) µg /g Kreatinin	/	/
Urine	VMA/HVA/5HIAA mg/g Kreatinin	/	/
Urine	Serotonin im Urin µg /g Kreatinin	/	/
Serum	FIB4 (Fibrose Score)	/	/
General domain: MED2 - Haematology			
Technical domain: MED2.1 - Hemocytology			
EDTA whole blood	Sedimentation rate (VS)	Photometry (Alifax Test, BCL Indumed)	Photometrical capillary stopped flow kinetic analysis
EDTA whole blood	HbA1c	HPLC (TOSOH G11)	HPLC
EDTA whole blood	Abnormal blood films (manual differentiation)	Light microscopy (Nikon)	brightfield microscopy after staining
EDTA whole blood	Microscopic count of reticulocytes	Manually	brightfield microscopy after staining
EDTA whole blood	Blood count and leucocyte differentiation	Flow cytometry (XN 9000, Sysmex)	Optical count

Objects submitted for analysis	Characteristics or properties measured	Measurement principle and equipment	Analysis methods
EDTA whole blood	Reticulocytes		
Technical domain: MED2.2 - Coagulation			
Human plasma samples: Citrate	AT III	Photometry (ACL Top 500 Instrument Laboratory)	Coagulometric
	Protein C		Chromogenetic Assay
	Free Protein S		Latex immunoassay
	Resistance to activated protein C		Coagulometric
	Quick + INR	Elektromagnetic (STA_R MAX 3)	Coagulometric
	Prothrombin time (PTT)		Coagulometric
	Thrombin time (TZ)		Coagulometric
	Fibrinogen (FIB)		Coagulometric
	D-Dimer	Photometry (STA_R MAX 3)	Latex immunoassay
General domain: MED3 - Immunology			
Technical domain: MED3.1 - Allergy			
Serum	Total IgE	Fluorescent immunoassay (automated system ImmunoCAP, Phadia)	FEIA
Serum	Specific IgE		
Stool	Histamin	ELISA and related immunoassays (manual test)	ELISA
Technical domain: MED3.2 - Autoimmune diagnostics			
Serum	Euroline System Sklerose Profil	Colorimetric membrane-based immunoassay (EuroblotOne, automated system Euroimmun)	Blot
Serum	ANA Differentiation		
Serum	Differentiation of liverspecific AB		
Serum	Myositis		
Serum	Ganglioside IgM, IgG		
Serum	Anti-MPO, Anti-PR3 (IgG)		
Serum	Anti-GAD (Glutamatedecarboxylase) (IgG)	ELISA and related immunoassays (manual test)	ELISA
Serum	Anti-IA2 (Tyrosin-Phosphatase) (IgG)	ELISA and related immunoassays (manual test)	ELISA
Serum	Anti-Endomysium IgA	IFT (IF-Sprinter, EUROStar Microscope, half automated processing, Euroimmun)	IFT

Objects submitted for analysis	Characteristics or properties measured	Measurement principle and equipment	Analysis methods
Serum	Liver mosaic AB	IFT (IF-Sprinter, EUROStar Microscope, half automated processing, Euroimmun)	IFT
Serum	ANA		
Serum	Granulocytes mosaic: ANCA c,p		
Serum	ds DNA	ELISA and related immunoassays (automated system, Euroimmun)	ELISA
<i>Phadia</i>			
Serum	Gliadin IgG	Fluoreszenz-Enzym-Immuno-Assay (automated system, Phadia 250, thermo scientific)	EliA
Serum	Gliadin IgA		
Serum	Transglutaminase IgG		
Serum	Transglutaminase IgA		
Serum	GBM		
Serum	Cardiolipin IgG		
Serum	Beta 2 Glycoprotein		
Serum	ACCP		
Serum	Anti-Saccaromyces cerevisiae IgG (ASCA)		
<i>Cobas 8000 e602</i>			
Serum	TRAK	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	E
Serum	Anti-TPO (MAK)		
Serum	Anti-TG (TAK)		
<i>Stool tests</i>			
Stool	anti-Gliadin IGA	ELISA and related immunoassays (manual test)	ELISA
Stool	Anti-Transglutaminase sIGA	ELISA and related immunoassays (manual test)	ELISA
General domain: MED4 - Medical microbiology			
Technical domain: MED4.2 – Medical bacteriology			
Urine	Urine sediment	light microscopy	Bright field microscopy
		automated microscopy (Cobas 6500, Roche)	Cell / particle counting
Anca Urine, fecal samples and swabs	Bacteria	Bacterial culture (Previ Isola, Bio –Mérieux) WASP	Automated and manual inoculation
	Bacteria in urine; Bacteria in stool	Mass spectrometry (Bio-Mérieux)	MALDI-TOF

Objects submitted for analysis	Characteristics or properties measured	Measurement principle and equipment	Analysis methods
	Identification of aerobic and anaerobic bacteria	Mass spectrometry (Bio-Mérieux)	MALDI-TOF
	Identification of Methicillin-resistant Staphylococci (MRSA)	Bacterial culture	Agar diffusion Colorimetric identification by culture
	Detection of minimal inhibition concentrations of antimicrobial agents	Antimicrobial susceptibility test	E-test (Bio-Mérieux)
	Inhibiting substances of bacterial growth	Antimicrobial susceptibility test (manual test)	Inhibitor test / Agar diffusion
	Confirmation of Carbapenemase	qualitativer kolorimetrischer Test	Biochemical identification
	ATB Haemo EU (08); ATB Strep EU (08); ATB Fungus 3; ATB Staph EU (08); ATB UR EU (08); ATB PSE EU (08)	Antimicrobial susceptibility test (manual test, Bio-Mérieux)	MIC assay
	Vitek AST N366 ; Vitek ST03	Antimicrobial susceptibility test	Fluorescent AST (Vitek, Bio-Mérieux)
	Vitek P 592, AST YS08	Antimicrobial susceptibility test	MIC assay (Vitek, Bio-Mérieux)
	Vitek GN; Vitek GP, Vitek NH, ANC	Microbial identification	Colorimetric identification (Vitek, Bio-Mérieux)
	Staphylococci	Agglutination assay (manual test, Pastorex Strep, Staph; Bio-Rad)	Rapid latex agglutination test
	PBP2A Culture Colony Test (MRSA)	immunchromatographischer Membran- Schnelltest	Enzymatic assay
	Catalase	Microbial characterization (manual test, Bio-Mérieux)	Enzymatic assay
	Oxidase; Indol	Microbial characterization (manual test, BD)	Enzymatic assay
	Gram positive bacteria	Microbial characterization (manual test, Bio-Mérieux)	Bio- chemical colourisation using gram stain
	Salmonella ; E. Coli; Shigella	Agglutination assay (manual test, Sifin)	Slide agglutination test
Stool tests			
Stool	Antibiogramm (Antimicrobial susceptibility test (manual test))	Agardiffusion	Inhibiting substances of bacterial growth
Stool	Acid-fast bacteria	Kinyoun Staining	Mikroskopie

Objects submitted for analysis	Characteristics or properties measured	Measurement principle and equipment	Analysis methods
		Electrochemical analysis (manual)	
<i>Urine</i>			
Urine	Legionella Antigen	Visual assessment	Immuno-chromatographic assay
Stool	Identification of parasites, worms and eggs in stool	Light microscopy (Nikon/Leica)	Brightfield microscopy after staining
EDTA whole blood	Malaria Diagnostics	Light microscopy (Nikon/Leica)	Brightfield microscopy after staining
Technical domain: MED4.4 – Medical mycology			
Urine, fecal samples and swabs	Identification of mold	Microbial characterization (manual test, Merck)	Bio-chemical colourisation using Lactophenol Blue
	Identification of dermatophytes	Light microscopy (Nikon)	Bright field and phase-contrast microscopy
Pure isolate	Identification of mold	Light microscopy (Nikon)	Bright field and phase-contrast microscopy
	Identification of yeast / dermatophytes	Mass spectrometry (Bio-Mérieux)	MALDI-TOF
	Vitek YST	Microbial identification	Colorimetric identification (Vitek, Bio-Mérieux)
Technical domain: MED4.7 – Calculated parameters			
Gram stain vaginal swab	Nugent Score	Light microscopy (Leica)	Calculation
Technical domain: MED4.6 - Infectious molecular biology			
Serum, Plasma EDTA	HBV Quantification	Real-Time PCR (GeneXpert)	DNA / RNA testing
Serum, Plasma EDTA	HCV RNA Quantification	Real-Time PCR (GeneXpert)	DNA / RNA testing
Stool	Giardia lamblia	Extraction of nucleic acids (EasyMAG, Biomérieux) Amplification (CFX96, Bio-Rad) Detection (Seegene)	Multiplex, hydrolysis probe based real-time PCR DNA / RNA testing
	Cryptosporidium parvum		
	Entamoeba histolytica		
Stool	Adenovirus	Extraction of nucleic acids (EasyMAG, Biomérieux) Amplification (CFX96, Bio-Rad)	Multiplex, hydrolysis probe based real-time PCR DNA / RNA testing
	Norovirus G1		
	Norovirus G2		

Objects submitted for analysis	Characteristics or properties measured	Measurement principle and equipment	Analysis methods
	Astrovirus	Detection (Seegene)	
	Rotavirus		
	Sapovirus		
Stool, Plasma EDTA, Swab, Cerebrospinal Fluid (CSF), Eye Swab	Enterovirus	Extraction of nucleic acids (EasyMAG, Biomérieux) Amplification (ABI 7500, Applied Biosystems / CFX96, Bio-Rad / Light Cycler 480, Roche) Detection (Fast Track Diagnostics)	Multiplex, hydrolysis probe (TaqMan) based real-time PCR DNA / RNA testing
	Parechovirus		
	Adenovirus		
Swab, Sputum	Parainfluenza 1	Extraction of nucleic acids (EasyMAG, Biomérieux) Amplification (ABI 7500, Applied Biosystems / CFX96, Bio-Rad / Light Cycler 480, Roche) Detection (Fast Track Diagnostics)	Multiplex, hydrolysis probe (TaqMan) based real-time PCR DNA / RNA testing
	Parainfluenza 2		
	Parainfluenza 3		
	Parainfluenza 4		
	Rhinovirus		
	Coronavirus NL63		
	Coronavirus 229E		
	Coronavirus OC43		
	Adenovirus		
	Enterovirus		
	Parechovirus		
	Bocavirus		
	Coronavirus HKU-1		
Human Metapneumonie Virus (Hump)			
Swab, Sputum	Mycoplasma pneumoniae	Extraction of nucleic acids (EasyMAG, Biomérieux) Amplification (ABI 7500, Applied Biosystems / CFX96, Bio-Rad / Light Cycler 480, Roche) Detection (Fast Track Diagnostics)	Multiplex, hydrolysis probe (TaqMan) based real-time PCR DNA / RNA testing
	Chlamydia pneumoniae		
	Legionella pneumophila / longbeachae		
Plasma EDTA, Swab	Epstein-Barr Virus (EBV)	Extraction of nucleic acids (EasyMAG, Biomérieux) Amplification (ABI 7500, Applied Biosystems / CFX96, Bio-Rad / Light Cycler 480, Roche)	Multiplex, hydrolysis probe (TaqMan) based real-time PCR DNA / RNA testing
	Adenovirus		
Urine, Plasma EDTA, Swab	Cytomegalovirus (CMV)	Detection (Fast Track Diagnostics)	

Objects submitted for analysis	Characteristics or properties measured	Measurement principle and equipment	Analysis methods
Swab, Vesicle Fluid, Semen, Plasma EDTA	Herpes Simplex Virus 1 (HSV1)	Extraction of nucleic acids (EasyMAG, Biomérieux) Amplification (ABI 7500, Applied Biosystems / CFX96, Bio-Rad / Light Cyclor 480, Roche) Detection (Fast Track Diagnostics)	Multiplex, hydrolysis probe (TaqMan) based real-time PCR DNA / RNA testing
	Herpes Simplex Virus 2 (HSV2)		
	Varizella Zoster (VZV)		
Stool	Salmonella spp	Extraction of nucleic acids (EasyMAG, Biomérieux) Amplification (CFX96, Bio-Rad) Detection (Seegene)	Multiplex, hydrolysis probe based real-time PCR DNA / RNA testing
	Yersinia spp		
	Shigella spp		
	Campylobacter spp		
	Escherichia coli verotoxin (EHEC)		
	Clostridium difficile Toxin		
	ESTEC		
Swab, Skin particles, Hair, Nails	Trichophyton rubrum/soudanense	Extraction of nucleic acids (EasyMAG, Biomérieux) Amplification (LightCycler480, Roche) Detection (PathoNostics)	Multiplex, hydrolysis probe, real-time PCR, DNA / RNA testing
	Trichophyton mentagrophytes/interdigitale		
	Trichophyton tonsurans		
	Trichophyton schoenleinii/quinckeanum		
	Trichophyton benhamiae		
	Trichophyton verrucosum		
	Scopulariopsis brevicaulis		
	Nannizzia gypsea		
	Epidermophyton floccosum		
	Candida albicans		
	Candida parapsilosis		
Swab (Genital, uretral), Urine	Treponema pallidum (syphilis)	Extraction of nucleic acids (EasyMAG, Biomérieux) Amplification (ABI 7500, Applied Biosystems / CFX96, Bio-Rad) Detection (Fast Track Diagnostics)	Multiplex, hydrolysis probe (TaqMan) based real-time PCR DNA / RNA testing
	Herpes Simplex Virus 1 (HSV1)		
	Herpes Simplex Virus 2 (HSV2)		
Plasma EDTA, Swab, Sputum	Human Herpes Virus (HHV7)	Extraction of nucleic acids (EasyMAG, Biomérieux) Amplification (ABI 7500, Applied Biosystems / CFX96,	Multiplex, hydrolysis probe (TaqMan) based real-time PCR DNA / RNA testing
	Human Herpes Virus (HHV6)		

Objects submitted for analysis	Characteristics or properties measured	Measurement principle and equipment	Analysis methods
	Parvovirus B19	Bio-Rad / Light Cycler 480, Roche) Detection (Fast Track Diagnostics)	
	Enterovirus		
Swab nasopharynx	Bordetella pertussis	Extraction of nucleic acids (EasyMAG, Biomérieux) Amplification (ABI 7500, Applied Biosystems / CFX96, Bio-Rad / Light Cycler 480, Roche) Detection (Fast Track Diagnostics)	Multiplex, hydrolysis probe (TaqMan) based real-time PCR DNA / RNA testing
Blood	Plasmodium spp.	Extraction of nucleic acids (EasyMAG, Biomérieux) Amplification (LightCycler480, Roche) Detection (Altona Diagnostics)	Multiplex, hydrolysis probe, real-time PCR, DNA / RNA testing
	Plasmodium falciparum		
	Plasmodium vivax		
	Plasmodium malariae		
	Plasmodium ovale		
	Plasmodium knowlesi		
Swab, Urine, Thinprep	Candida albicans	Extraction of nucleic acids (EasyMAG, Biomérieux) Amplification (CFX96, Bio-Rad) Detection (Seegene)	Multiplex, hydrolysis probe based real-time PCR DNA / RNA testing
	Candida glabrata		
	Candida krusei		
	Candida tropicalis		
	Candida parapsilosis		
	Candida lusitaniae		
	Candida dubliniensis		
Urine, Swab, Thinprep	Mycoplasma genitalum	Extraction of nucleic acids (EasyMAG, Biomérieux) Amplification (A CFX96, Bio-Rad) Detection (Seegene)	Multiplex, hydrolysis probe based real-time PCR DNA / RNA testing
	Trichomonas vaginalis		
	Neisseria gonorrhoeae		
	Chlamydia trachomatis		
Urine, Swab, Thinprep	Mycoplasma hominis	Extraction of nucleic acids (EasyMAG, Biomérieux) Amplification (A CFX96, Bio-Rad) Detection (Seegene)	Multiplex, hydrolysis probe based real-time PCR DNA / RNA testing
	Trichomonas vaginalis		
	Ureaplasma urealyticum		
	Ureaplasma parvum		
	Neisseria gonorrhoeae		
	Chlamydia trachomatis		
Thinprep	HPV High Risk Screening	Real-Time PCR (GeneXpert)	DNA / RNA testing
Thinprep Swab Urine	HPV High Risk / Low Risk	Extraction of nucleic acids (EasyMAG, Biomérieux)	Real-Time PCR

Objects submitted for analysis	Characteristics or properties measured	Measurement principle and equipment	Analysis methods
		Amplification (CFX 96, BioRad) Detection : Seegene	
Sputum Swab	Influenza A	Extraction of nucleic acids (EasyMAG, Biomérieux) Amplification (CFX96, Bio-Rad) Detection (Seegene)	Multiplex, hydrolysis probe based real-time PCR DNA / RNA testing
	Influenza B		
	RSV A/B		
	SARS-CoV-2		
Swab nasopharynx, throat	Sars-CoV-2	Extraction of nucleic acids: EasyMAG, BioMérieux Amplification: ABI 7500, Applied Biosystems / CFX96, Bio-Rad / Light Cyclor 480, Roche / QS-5, Applied Biosystems Detection: FTD Sars-CoV-2 Assay (Fast Track Diagnostics)	Real-Time PCR
Sputum			
Bronchoalveolar Lavage			
Swab nasopharynx	Sars-CoV-2	COVID-19 PCR (Instrument: Vita PCR Credo Diagnostics)	PCR Real Time
General domain : MED5 - Serology			
Technical domain : MED5.1 - Infectious Serology			
<i>Cobas 8000 e602</i>			
Serum	Anti-HAV total	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	Anti-HAV IgM	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	HBsAg/Confirmation	Chemiluminescent immunoassay (automated system, Cobas 8000, Roche)	ECLIA
Serum	Anti-HBs	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	Anti-HBc	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	HCV- Antibodies	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA

Objects submitted for analysis	Characteristics or properties measured	Measurement principle and equipment	Analysis methods
Serum	HIV-Antibodies	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
Serum	Rubella IgG/IgM	ELISA and related immunoassays (automated system, Cobas 8000 , Roche)	ECLIA
Serum	Toxoplasma gondii IgG, IgM	Chemiluminescent immunoassay (automated system, Cobas 8000, Roche)	ECLIA
Serum	CMV IgG/IgM	ELISA and related immunoassays (automated system, Cobas 8000 , Roche)	ECLIA
Serum	Treponema pallidum (Syphilis)	ELISA and related immunoassays (automated system, Cobas 8000 , Roche)	ECLIA
Serum	Anti-EBV antibodies	Agglutination assay (manual test)	Agglutination test (Paul Bunnell)
Serum	Anti-SARS-CoV-2 S (Anti-Spike Protein)	ELISA and related immunoassays (automated system, Cobas 8000, Roche)	ECLIA
VIDAS 3			
Serum	HIV p-24 Ag	ELISA and related immunoassays (automated system, Vidas 3, Bio-Mérieux)	ELFA
Serum	HIV p-24 confirmation tests	ELISA and related immunoassays (automated system, Vidas 3, Bio-Mérieux)	ELFA
Serum	Toxoplasma gondii Avidity	ELISA and related immunoassays (automated system, Vidas 3, Bio-Mérieux)	ELFA
Serum	CMV IgG Avidity	ELISA and related immunoassays (automated system, Vidas 3, Bio-Mérieux)	ELFA
Serum	Toxo IgG - confirmation tests	ELISA and related immunoassays (automated system, Vidas 3, Bio-Mérieux)	ELFA
Serum	Toxo IgM- confirmation tests	ELISA and related immunoassays (automated system, Vidas 3, Bio-Mérieux)	ELFA
Serum	Rubella IgG- confirmation tests	ELISA and related immunoassays (automated system, Vidas 3, Bio-Mérieux)	ELFA
Serum	Rubella IgM-confirmation tests	ELISA and related immunoassays (automated system, Vidas 3, Bio-Mérieux)	ELFA

Objects submitted for analysis	Characteristics or properties measured	Measurement principle and equipment	Analysis methods
Serum	CMV IgG-confirmation tests	ELISA and related immunoassays (automated system, Vidas 3, Bio-Mérieux)	ELFA
Serum	CMV IgM-confirmation tests	ELISA and related immunoassays (automated system, Vidas 3, Bio-Mérieux)	ELFA
Serum	HBe Ag / Anti-HBe	ELISA and related immunoassays (automated system, Vidas 3, Bio-Mérieux)	ELFA
Serum	HBc IgM	ELISA and related immunoassays (automated system, Vidas 3, Bio-Mérieux)	ELFA
<i>Liaison XL</i>			
Serum	Mumpsvirus IgG	ELISA and related immunoassays (automated system, Liaison XL / DiaSorin)	CLIA
Serum	Measlesvirus IgG		
Serum	Varizella Zoster Virus IgG		
Serum	HSV-1 IgG		
Serum	HSV-2 IgG		
Serum	HSV-1/2 IgM		
Serum	Chlamydia trachomatis IgG		
Serum	Chlamydia trachomatis IgA		
Serum	Varizella Zoster Virus IgM		
Serum	Mycoplasma pneumoniae IgG		
Serum	Mycoplasma pneumoniae IgM		
Serum	Borrelia burgdorferi IgG		
Serum	Borrelia burgdorferi IgM		
Serum	Mumpsvirus IgM		
Serum	Measlesvirus IgM		
Serum	Parvovirus B19 IgG		
Serum	Parvovirus B19 IgM		
Stool	Helicobacter pylori Antigen		
Serum	EBNA-1-IgG (EBV)		
Serum	VCA-IgG (EBV)		
Serum	VCA-IgM (EBV)		

Objects submitted for analysis	Characteristics or properties measured	Measurement principle and equipment	Analysis methods
<i>Euroimmun</i>			
Serum	Chlamydia pneumoniae IgG	ELISA and related immunoassays (automated system, Euroimmun)	ELISA
Serum	Chlamydia pneumoniae IgA		
Serum	Helicobacter pylori IgG		
Serum	Helicobacter pylori IgA		
Serum	Bordetella pertussis IgG		
Serum	Borrelia IgG – WB	Colorimetric membrane-based immunoassay (EuroblotOne, automated system Euroimmun)	Immunoblot
Serum	Borrelia IgM – WB		
Serum	Helicobacter IgG – Immunoblot	Colorimetric membrane-based immunoassay (half automated processing, Dynablot /Mikrogen)	Immunoblot
Serum	Helicobacter IgA – Immunoblot		
Serum	Toxoplasma gondii IgG		
Serum	Yersinia enterocolitica IgA, IgG, IgM		
Serum	Treponema Pallidum IgG/IgM Immunoblot (Syphilis)		
Serum	Parvovirus B19 IgM Confirmation- WB		
Serum	HCV-WB		
Serum	Treponema pallidum (Syphilis)	Agglutination Assay (manual test)	Agglutination (TP-PA)
Serum	VDRL (=RPR) (Syphilis)	Agglutination assay (manual test)	VDRL flocculation test
Serum	HIV-WB	Colorimetric membrane-based immunoassay (manual test)	Western blot
Serum	ADN (Anti-Streptodornase B)	ELISA and related immunoassays (manual test)	EIA
Serum	Tetanus IgG	ELISA and related immunoassays (manual test)	ELISA

Objects submitted for analysis	Characteristics or properties measured	Measurement principle and equipment	Analysis methods
General domain : MED9 - Collection of biological samples			
Technical domain : MED9.1 - Collection of biological samples, carried out by the laboratory or under its responsibility			
Blood	/	Venipuncture	Manual primary sampling
Swab nasopharynx, throat, nose	/	Smear	Manual primary sampling

* Flexible scope:

The laboratory is deemed competent in implementing new test methods, objects submitted for analysis and characteristics or properties measured. The laboratory is responsible for the validation of the methods it implements. It is also responsible for managing the list of methods it uses, objects submitted for analysis and characteristics or properties measured within the framework of this accreditation.

The possibility of introducing new methods does not include the introduction of new measurement principles.

The list of accredited activities is available on request from the laboratory.