Accredited Body: Centrum kardiovaskulární a transplantační chirurgie Brno

**CAB Name**: Genetics Laboratory

CAB Number: 8257

**Certificate of Accreditation No.**: 616/2023

**Field of Accreditation**: Medical Laboratory - ČSN EN ISO 15189:2013

**Updated**: 02.10.2024

#### **Examinations:**

Ordinal Number	Analyte/ parameter/diagnostics	Principle of examination	Identification of method procedure/ equipment	Examined material	Degrees of freedom <sup>1</sup>	
	802 – Medical Microbiology					
1.	Detection of nucleic acids of infectious agents	Real-Time PCR	SOPA-GL-01, version 06; SOPP-GL-18, version 07; SOPP-GL-56, version 05; SOPP-GL-58, version 07; SOPP-GL-59, version 07; SOPP-GL-60, version 07; GeneXpert; RotorGene	Plasma, blood, bone marrow, cerebrospinal fluid, urine	A, B, C, D	

Ordinal Number	Analyte/ parameter/diagnostics	Principle of examination	Identification of method procedure/ equipment	Examined material	Degrees of freedom <sup>1</sup>	
	816 – Medical Genetics Laboratory					
1. Examination of germline genome	Examination of		SOPA-GL-02, version 06;	Blood, bone marrow, paraffin block, smear from buccal mucosa	A, B, C, D	
	e e		SOPP-GL-01, version 05;			
	variants		SOPP-GL-02, version 05;			
			SOPP-GL-04, version 05;			
			SOPP-GL-05, version 05;			
			SOPP-GL-06, version 05;			
			SOPP-GL-28, version 06;			
			SOPP-GL-32, version 04;			
			SOPP-GL-33, version 03;			
			SOPP-GL-36, version 05;			
			SOPP-GL-37, version 05;			
			SOPP-GL-39, version 05;			
			SOPP-GL-41, version 05;			
			SOPP-GL-43, version 05;			
			SOPP-GL-44, version 05;			
			SOPP-GL-49, version 05;			
			SOPP-GL-56, version 05;			
			SOPP-GL-57, version 03;			
			SOPP-GL-61, version 03;			
			ABI 3130			
2.	Examination of ARMS;	ARMS;	SOPA-GL-03, version 05;	Blood	A, B, D	
	apolipoprotein B-100	polipoprotein B-100 ACRS	SOPP-GL-28, version 06;			
			SOPP-GL-29, version 05;			
			SOPP-GL-30, version 05			
3.	Examination of apolipoprotein E	PCR and	SOPA-GL-04, version 05;	Blood	A, B, D	
		restriction analysis	SOPP-GL-04, version 05;			
			SOPP-GL-28, version 06;			
			SOPP-GL-31, version 05			
4.	Examination of germline genome variants	line genome	SOPA-GL-05, version 05;	Blood, smear from buccal mucosa	A, B, C, D	
			SOPP-GL-49, version 05;			
		variants		SOPP-GL-53, version 04;		

Ordinal Number	Analyte/ parameter/diagnostics	Principle of examination	Identification of method procedure/ equipment	Examined material	Degrees of freedom <sup>1</sup>
			SOPP-GL-56, version 05;		
			RotorGene		
5.	Examination of	NGS-MPS	SOPA-GL-06, version 06;	Blood, bone marrow, paraffin block, smear from buccal mucosa	A, B, C, D
	germline genome variants		SOPP-GL-28, version 06;		
Van	variants		SOPP-GL-33, version 04;		
			SOPP-GL-49, version 05;		
			SOPP-GL-56, version 05;		
			SOPP-GL-61, version 04;		
			SOPP-GL-65, version 02;		
			SOPP-GL-66, version 04;		
			SOPP-GL-67, version 06;		
			SOPP-GL-68, version 05;		
			SOPP-GL-69, version 06;		
			SOPP-GL-70, version 05;		
			NextSeq;		
			MiSeq;		
			DNBSEQ-G99		

### **Specification of the scope of accreditation:**

Field Nr. / Ordinal Number	Detailed information on activities within the scope of accreditation	
802/1	DNA HBV (Hepatitis B virus); DNA CMV (Cytomegalovirus); DNA EBV (Epstein-Barr virus); DNA BKV (BK virus); RNA HCV (Hepatitis C virus)	
816/1	X-linked hyper IgM syndrome (X-HIGM; CD40LG)	
	X-linked severe combined immunodeficiency (X-SCID; <i>IL2RG</i> )	
	X-linked agammaglobulinemia (XLA; BTK)	
	AR - severe combined immunodeficiency (AR-SCID; RAG1, RAG2)	
	Omenn's syndrome (OMENN; RAG1, RAG2)	
	Wiskott-Aldrich syndrome (WAS; WAS)	
	Chronic granulomatous disease (CGD; CYBB)	
	X-linked lymphoproliferative syndrome (XLP; SH2D1A, XIAP)	
	Autoimmune lymphoproliferative syndrome type V (ALPS V; CTLA4)	

	Dysbetalipoproteinaemia (HLP III; APOE)
816/2	Variant p.Arg3527Gln
816/3	Alleles E2, E3, E4
816/4	Factor V (G1691A-Leiden); Prothrombin (G20210A)]
816/5	Panel IEI: ADA, AICDA, AIRE, AK2, AP3B1, ATM, BLM, BTK, CASP8, CASP10, CD19, CD27, CD8A, CD3D, CD3E, CD3G, CD40, CD59, CD247, CD40LG, CECR1, CIITA, CR2, CYBA, CYBB, DCLRE1C, DKC1, DNMT3B, DOCK8, ELANE, FERMT3, FOXP3, G6PC3, GATA2, HAX1, IFNGR1, IFNGR2, IGHM, IGLL1, IL12RB1, IL2RA, IL2RG, IL7R, ITGB2, ITK, JAK3, LCK, LIG1, LIG4, LYST, MASP2, MEFV, MVK, NBN, NBS1, NCF2, NFKB1, NFKB2, NFKBIA, NHEJ1, NLRP3, NOD2, ORAI1, PIK3CD, PIK3R1, PLG, PNP, PRF1, PRKDC, PTPRC, RAB27A, RAG1, RAG2, RFX5, RFXANK, RFXAP, RMRP, SBDS, SERPING1, SH2D1A, SLC37A4, SMARCAL1, STAT1, STAT3, STIM1, TAP1, TAP2, TAPBP, TBX1, TNFRSF13B, TNFRSF1A, TNFSF5, TREX1, TYK2, WAS, XIAP, ZAP70  Panel FH: ABCG5, ABCG8, APOB, APOE, LDLR, LDLRAP1, LIPA, PCSK9

#### **Explanatory notes:**

- 1 Established degrees of freedom according to MPA 00-09-..:
  - A Flexibility concerning the documented examination/ sample collection procedure
  - B Flexibility concerning the technique
  - C Flexibility concerning the analytes / parameters
  - D Flexibility concerning the examined material

If no degree of freedom is specified, the laboratory cannot apply a flexible approach to the scope of accreditation for this examination.

ARMS Amplification Refractory Mutation System ACRS Amplification Created Restriction Site

FH Familial hypercholesterolemia IEI Inborn errors of immunity

NGS-MPS Next Generation Sequencing – Massively Parallel Sequencing

PCR Polymerase Chain Reaction

Real-Time PCR Polymerase Chain Reaction in real time