

**The Appendix is an integral part of  
Certificate of Accreditation No. 221/2020 of 07/04/2020**

**Akreditovaný subjekt podle ČSN EN ISO/IEC 17025:2018:**

**Genomia s.r.o.**  
Genomia  
Republikánská 6, 312 00 Plzeň

*The Laboratory has a flexible scope of accreditation permitted as detailed in the Annex.*

*Updated list of activities provided within the flexible scope of accreditation is available at the laboratory, on the laboratory website [www.genomia.cz/cz/quality](http://www.genomia.cz/cz/quality) and from the Laboratory Manager.*

*The Laboratory provides expert opinions and interprets test results*

**Tests:**

Ordinal number <sup>1</sup>	Test procedure/method name	Test procedure/method identification <sup>2</sup>	Tested object
1.	Determination of sex of birds by analysis of length of PCR fragments of CHD1 gene <sup>3</sup>	SOP18	Blood, genomic DNA, tissue, feathers
2.	Identification of the DNA profile in animals by fragment analysis and parenthood verification <sup>4</sup>	SOP35	Blood, mucous membrane swab, genomic DNA, tissue, feathers, horse hair
3.	Reserved		
4.	Detection of insertion or deletion mutation in the animal's genome by fragment analysis <sup>5</sup>	SOP171	Blood, mucous membrane swab, genomic DNA, tissue, feathers
5.	Detection of the mutation in the animal's genome by direct DNA sequencing <sup>6</sup>	SOP172	Blood, mucous membrane swab, genomic DNA, tissue, feathers
6.	Detection of mutation in the animal's genome by PCR-RFLP <sup>7</sup>	SOP173	Blood, mucous membrane swab, genomic DNA, tissue, feathers, horse hair
7.	Detection of mutation in the animal's genome by real-time PCR-ASA <sup>8</sup>	SOP175	Blood, mucous membrane swab, genomic DNA, tissue, feathers
8.	Detection of insertion or deletion mutation in the animal's genome by PCR followed by electrophoretic detection <sup>9</sup>	SOP176	Blood, mucous membrane swab, genomic DNA, tissue, feathers
9.	Detection of mutation in the animal's genome by PCR-HRM using unlabeled lunaprobe <sup>10</sup>	SOP182	Blood, mucous membrane swab, genomic DNA

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Ordinal number <sup>1</sup>	Test procedure/method name	Test procedure/method identification <sup>2</sup>	Tested object
10.	Detection of expansion of NHLRC1 gene 12-nucleotide repeat sequence causing the Lafora epilepsy in various dog breeds by ASA-PCR method	SOP187-Lafora	Blood, mucous membrane swab, genomic DNA

<sup>1</sup> Asterisk at the ordinal number identifies the tests, which the Laboratory is qualified to carry out outside the permanent laboratory premises

<sup>2</sup> if the document identifying the test procedure is dated, only these specific procedures are used. If the document identifying the test procedure is not dated, the latest edition of the specified procedure is used (including any changes)

<sup>3</sup> for the orders Psittaciformes, Falconiformes, Cuculiformes, Columbiformes, Galliformes, Passeriformes, Ciconiiformes, Srigiformes  
Part A) by fragment analysis  
Part B) by ARMS

<sup>4</sup> SOP035-pes\_5: Identification of the DNA profile in dogs by fragment analysis and parentage verification: determined markers INRA21, AHT137, REN169D01, AHTH260, AHTk253, INU005, REN169O18, INU055, FH2848, AHTk211, CXX279, REN54P11, INU030, Amelogenin, AHT121, FH2054, REN162C04, AHTH171, REN247M23, AHTH130, REN105L03, REN64E19

SOP35-accipiter\_2: Identification of the DNA profile in hawks (*Accipiter gentilis*) by fragment analysis and parentage verification: determined markers Age10, Age9, Age7, Age4,  $\mu$ Age1a, Age5, Age11, Age2

SOP35-feline\_1: Identification of the DNA profile in cats by fragment analysis and parentage verification: determined markers FCA 026, FCA 069, FCA 075, FCA 105, FCA 149, FCA 201, FCA 220, FCA 229, FCA 293, FCA 310, FCA 441, FCA 453, FCA 649, FCA 678, ZFX Y

SOP35-amazona\_1: Identification of the DNA profile in Amazonas by fragment analysis and parentage verification: determined markers AgGT21, AgGT12, AgGT29, AgGT72, AgGT83

SOP35-ara\_1: Identification of the DNA profile in Macaws by fragment analysis and parentage verification: determined markers UnaCT55, UnaCT32, UnaCT21, UnaCT74, UnaCT43

SOP35-kakadu: Identification of the DNA profile in Cockatoos by fragment analysis and parentage verification: determined markers pCIA119, pCIA125, pCIA 139, pCIA105, pCID7, pCIA118, pCIA128, pCID109, pCI8

SOP35-equine: Identification of the DNA profile in horses by fragment analysis and parentage verification: determined markers VHL20, AHT5, HMS2, AHT4, HTG10, LEX3, ASB23, HMS1, ASB2, HTG6, HMS3, HTG4, CA425, HMS6, HTG7, ASB17, HMS7

<sup>5</sup> SOP171-MDR1\_1: Detection of c.295\_298delAGAT ABCB1 mutation in the MDR1 gene causing drug sensitivity in dogs by fragment analysis

SOP171-CMAH\_1: Detection of 18 bp insertion in position -53 5'UTR of the CMAH gene implicating feline blood group phenotype by fragment analysis

SOP171-HC\_1: Detection of g.85286582insC and g.85286582delC mutations in HSF4 gene causing hereditary cataract in several dog breeds by fragment analysis

SOP171-XLPRA\_1: Detection of mutation c.1028\_1032delGAGAA in RPGR gene causing XL-PRA in Siberian Husky and Samoyed by fragment analysis

SOP171-TNS\_1: Detection of station g.4411956\_441190delGTTT in VPS13B gene causing TNS in Border collies by fragment analysis

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- <sup>6</sup> SOP172-OLFML3\_1: Detection of c.590G>A mutation in OLFML3 gene causing predisposition to goniodysgenesis and glaucoma in Border Collie by direct DNA sequencing method
- <sup>7</sup> SOP173-cystinurie\_1: Detection of c.586C>T mutation in exon 2 of SLC3A1 gene causing cystinuria in Newfoundland and Landseer breeds by PCR-RFLP  
SOP173-MC\_1: Detection of c.803C>T mutation in CLCN1 gene causing Congenital Myotonia in Miniature Schnauzers by PCR-RFLP  
SOP173-WFFS: Detection of c.2032G>A mutation in PLOD1 gene causing WFFS disease in warmbloods by PCR-RFLP method
- <sup>8</sup> SOP175-FN\_1 Detection of c.115A>T mutation in exon 3 of COL4A4 gene causing Familiar Nephropathy in English Cocker Spaniels by real-time PCR-ASA  
SOP175-L2HGA\_1 Detection of mutation c.[1297T>C;1299C>T] in exon 10 of L2HGDH gene causing L2HGA in Staffordshire bull terriers by real-time PCR-ASA  
SOP175-SCA\_1 Detection of mutation c.627C>G KCNJ10 causing SCA in Parson Russell and Jack Russell Terriers by real-time PCR-ASA  
SOP175-HCM-MM\_1 Detection of mutation c.91G>C in MYBPC3 gene causing HCM in Maine Coon cats by real-time PCR-ASA  
SOP175-HCM-RAG\_1 Detection of mutation c.2458C>T in MYBPC3 gene causing HCM in Ragdoll cats by real-time PCR-ASA  
SOP175-PKD: Detection of c.10063C >A mutation in exon 29 of PKD1 gene causing the PKD disease in cats by real-time PCR-ASA method  
SOP175-PLL: Detection of c.1473+1G>A mutation in ADAMTS17 gene causing PLL disease in various dog breeds by real-time PCR-ASA method  
SOP175-MDR1: Detection of c.295\_298delAGAT mutation in ABCB1 gene causing drug sensitivity in dogs by real-time PCR-ASA method
- <sup>9</sup> SOP176-BNAt\_1: Detection of mutation insertion of retrotransposon in GRM1 gene causing BNAt in Coton de Tulear by ASA-PCR  
SOP176-FS: Detection of mutation g.38013703\_38014019del in exon 14 and 3'UTR region of FAN1 gene causing the Fanconi syndrome in Basenji by ASA-PCR method
- <sup>10</sup> SOP182-PCD: Detection of c.286C>T mutation in CCDC39 gene causing primary ciliary dyskinesia in Old English Sheepdog breed by PCR-HRM using unlabeled lunaprobe  
SOP182-PLL: Detection of c.1473+1G>A mutation in ADAMTS17 gene causing PLL disease in several dog breeds by PCR-HRM using unlabeled lunaprobe  
SOP182-CMR2: Detection of c.482G>A mutation in VMD2 gene causing CMR2 disease in dogs by PCR-HRM using unlabeled lunaprobe  
SOP182-vWDI: Detection of c.7437G>A mutation in exon 43 of VWF gene causing vWD type I in several dog breeds by PCR-HRM using unlabeled lunaprobe  
SOP182-NCLA: Detection of c.296G>A mutation in ARSG gene causing NCL-A in American Staffordshire Terrier and American Pit Bull Terrier by PCR-HRM using unlabeled lunaprobe

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Annex:

Flexible scope of accreditation

Ordinal numbers of tests
1, 2, 4, 5, 6, 7, 8, 9

The Laboratory is allowed to modify the test methods listed in the Annex within the specified scope of accreditation provided the measuring principle is observed. The flexible approach to the scope of accreditation cannot be applied to the tests not included in the Annex.

Abbreviations:

PCR – Polymerase chain reaction

PCR-RFLP – Polymerase chain reaction – Restriction fragment length polymorphism

ASA – Allele Specific Amplification

PKD – Polycystic kidney disease

HCM – Hypertrophic cardiomyopathy

XLPPRA – X-linked progressive retinal atrophy

HC – Hereditary cataract

CMR2 – Canine Multifocal Retinopathy 2

PLL – Primary lens luxation

vWD – von Willebrand disease

TNS – Trapped neutrophil syndrome

BNAt – Bandera's neonatal ataxia

HRM – high resolution melting

ARMS – amplification refractory mutation system

PCD – Primary ciliary dyskinesia

L2HGA – L-2-hydroxyglutaric aciduria

NCL-A – Neuronal Ceroid Lipofuscinosis type A

FS – Fanconi syndrome

WFFS – Warmblood Fragile Foal Syndrome