The Appendix is an integral part of
Certificate of Accreditation No. 322/2018 of 18/06/2018

Akreditovaný subjekt podle ČSN EN ISO/IEC 17025:2005:

Genomia s.r.o.
Genomia
Janáčkova 51, 32300 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 and from the Laboratory Manager.

The Laboratory provides expert opinions and interprets test results

Tests:

Ordinal number	Test procedure/method name	Test procedure/method identification	Tested object
1.	Determination of sex of birds by analysis of length of PCR fragments of CHD1 gene [1)]	SOP18	Blood, genomic DNA, tissue, feathers
2.	Identification of the DNA profile in animals by fragment analysis and parenthood verification [2)]	SOP35	Blood, mucous membrane swab, genomic DNA, tissue, feathers
3.	Detection of mutation in the animal's genome by PCR-HRM [3)]	SOP169	Blood, mucous membrane swab, genomic DNA, tissue, feathers
4.	Detection of insertion or deletion mutation in the animal's genome by fragment analysis [4)]	SOP171	Blood, mucous membrane swab, genomic DNA, tissue, feathers
5.	Detection of the mutation in the animal's genome by direct DNA sequencing [5)]	SOP172	Blood, mucous membrane swab, genomic DNA, tissue, feathers
6.	Detection of mutation in the animal's genome by PCR-RFLP [6)]	SOP173	Blood, mucous membrane swab, genomic DNA, tissue, feathers
7.	Detection of mutation in the animal's genome by real-time PCR-ASA [7)]	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 [8)]	SOP176	Blood, mucous membrane swab, genomic DNA, tissue, feathers
9.	Detection of mutation in the animal's genome by PCR-HRM using unlabeled lunaprobe[9)]	SOP182	Blood, mucous membrane swab, genomic DNA

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Ordinal number	Test procedure/method name	Test procedure/method identification	Tested object
10.	Detection of expansion of NHLRC1 gene 12-nucleotide repeat sequence causing the Lafora epilepsy in beagles and miniature wirehaired dachshunds by ASA-PCR method	SOP187-Lafora	Blood, mucous membrane swab, genomic DNA

Annex:
Flexible scope of accreditation

Ordinal numbers of tests
1,2,3,4,5,6,7,8,9

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.

1)

for the orders Psittaciformes, Falconiformes, Cuculiformes, Columbiformes, Galliformes, Passeriformes, Ciconiiformes, Srigiformes

Part A) by fragment analysis

Part B) by ARMS

2)

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, μAge1a, 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, ZFXY

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

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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

3)

SOP169-IGS-border_1: Detection of c.8392delC mutation in the CUBN gene causing IGS in border collies by HRMA

SOP169-CKCSID: Detection of c.977delC mutation in the FAM83H gene causing CKCSID in Cavalier King Charles Spaniels by HRMA

4)

SOP171-MDR1_1: Detection of c.227_230delATAG 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

SOP171-ICTA: Detection of c.1451_1453delinsTACTACTA mutation in PNPLA1 gene causing ichthyosis in Golden Retrievers by fragment analysis

5)

SOP172-HCM-MM_1: Detection of c.91G>C mutation in MYBPC3 gene of Maine Coon cats by DNA sequencing

6)

SOP173-PKD_1: Detection of c.10063C>A mutation in exon 29 of PKD1 gene in cats causing PKD disease by PCR-RFLP

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 Schnautzers by PCR-RFLP

7)

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

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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

8)

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

9)

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

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

XLPRA – X-linked progressive retinal atrophy

HC – Hereditary cataract

CMR2 – Canine Multifocal Retinopathy 2

PLL – Primary lens luxation

vWD – von Willebrand disease

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TNS – Trapped neutrophil syndrome

BNAt – Bandera´s neonatal ataxia

HRM – high resolution melting

ARMS – amplification refractory mutation system

PCD – Primary ciliary dyskinesia

IGS – Imerslund-Gräsbeck syndrome

L2HGA – L-2-hydroxyglutaric aciduria

NCL-A – Neuronal Ceroid Lipofuscinosis type A

CKCSID – keratoconjuctivitis sicca ichthyosioform dermatosis

ICT-A – Ichthyosis

FS – Fanconi syndrome