Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-PL-18320-01-00 according to DIN EN ISO/IEC 17025:2018

Valid from: **25.06.2020**

Date of issue: 25.06.2020

Holder of certificate:

GeneControl GmbH
Senator-Gerauer-Straße 23a, 85586 Poing

Tests in the field:

Veterinary Medicine

Testing area:

Genetics (molecular genetics, parental testing)

Within the given testing field marked with *, the testing laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, the free choice of standard or equivalent testing methods.
Within the given testing field marked with **, the testing laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, the modification, development and refinement of testing methods.
The listed testing methods are exemplary. The testing laboratory maintains a current list of all testing methods within the flexible scope of accreditation.

The certificate together with its annex reflects the status at the time of the date of issue. The current status of the scope of accreditation can be found in the database of accredited bodies of Deutsche Akkreditierungsstelle GmbH. https://www.dakks.de/en/content/accredited-bodies-dakks

Testing area: genetics

Type of Test: Amplification Method **

Polymerase Chain Reaction (PCR)

Analyte (measure)	Test material (matrix)	Testing method
Genotype horse for parentage and and identity testing	genomic DNA from blood, sperm, tissue and hair root samples from the horse	PCR - Fragment Analysis (STR)
Genotype cattle for parentage and identity testing	genomic DNA from blood, sperm, tissue and hair root samples from cattle	PCR - Fragment Analysis (STR)
Genotype pig for parentage and identity testing	genomic DNA from blood, sperm, tissue and hair root samples from pig	PCR - Fragment Analysis (STR)
Genotype sheep for parentage and identity testing	genomic DNA from blood, sperm, tissue and hair root samples from sheep	PCR - Fragment Analysis (STR)
Genotype goat for parentage and identity testing	genomic DNA from blood, sperm, tissue and hair root samples from goat	PCR - Fragment Analysis (STR)
Genotype dog for parentage and identity testing	genomic DNA from blood, tissue, swab and hair root samples from the dog	PCR - Fragment Analysis (STR)
Genotype cattle for marker-assisted selection	genomic DNA from blood, sperm, tissue and hair root samples from cattle	PCR - Fragment Analysis (STR)
Gene variants at the DNA-PKcs locus of the horse (SCID genetic testing)	genomic DNA from blood, sperm, tissue and hair root samples from the horse	Allele specific PCR with subsequent fluorescence detection
Detection of tobiano associated chromosome inversion on ECA3 of the horse (tobiano test)	genomic DNA from blood, hair root and sperm samples from the horse	Allele specific PCR with subsequent fluorescence detection
Gene variants at the ASIP locus of the horse (agouti test)	genomic DNA from blood, sperm, tissue and hair root samples from the horse	PCR - Fragment Analysis
Gene variants at the SW1 und SW3 locus of the horse (Splashed White)	genomic DNA from blood, sperm, tissue and hair root samples from the horse	PCR - Fragment Analysis
Gene variants at the RPE65 locus of the dog (CSNB genetic testing)	genomic DNA from blood, tissue, swab and hair root samples from dogs of the breed Briard	PCR - Fragment Analysis
Gene variants at the MOCS1 locus of cattle (arachnomelia)	genomic DNA from blood, tissue, sperm and hair root samples from cattle	PCR - Fragment Analysis
Gene variants at the STX17 locus of the horse (grey colour)	genomic DNA from blood, sperm, tissue and hair root samples from the horse	PCR - Fragment Analysis

Analyte (measure)	Test material (matrix)	Testing method
Gene variants at the POLLED locus of cattle	genomic DNA from blood, sperm, tissue and hair root samples from cattle	PCR - Fragment Analysis
Detection of X and Y chromosome of cattle for gender determination	genomic DNA from blood, tissue and hair root samples from cattle	PCR - Fragment Analysis
Detection of Y chromosome of cattle for determination of freemartin status	genomic DNA from blood from female cattle of multiple mixed gender gestations	PCR - Fragment Analysis
Gene variants at the LAMA3 locus of the horse (JEB genetic testing)	genomic DNA from blood, hair root, tissue and sperm samples from the horse	PCR - Fragment Analysis
Gene variants at the TOE1 locus of the horse (cerebellar abiotrophy)	genomic DNA from blood, sperm, tissue and hair root samples from the horse	Allele specific PCR with subsequent fluorescence detection
Gene variants at the MATP locus of the horse (cream dilution)	genomic DNA from blood, sperm, tissue and hair root samples from the horse	Allele specific PCR with subsequent fluorescence detection
Gene variants at the ryanodine receptor locus of the pig (MHS genetic testing)	genomic DNA from blood and tissue samples from pig	Allele specific PCR with subsequent fluorescence detection
Gene variants at the MYO5A locus of the horse (LFS genetic testing)	genomic DNA from blood, sperm, tissue and hair root samples from the horse	Allele specific PCR with subsequent fluorescence detection
Gene variants at the PPIB locus of the horse (HERDA genetic testing)	genomic DNA from blood, sperm, and hair root samples from the horse	Allele specific PCR with subsequent fluorescence detection
Gene variants at the EDNRB locus of the horse (LWO genetic testing)	genomic DNA from blood, sperm, tissue and hair root samples from the horse	Allele specific PCR with subsequent fluorescence detection
Gene variants at the COL7A1 locus of cattle (DEB genetic testing)	genomic DNA from blood, sperm, tissue and hair root samples from cattle	Allele specific PCR with subsequent fluorescence detection
Gene variants at the BTA4 position 49878773 of cattle (Weaver genetic testing)	genomic DNA from blood, sperm, tissue and hair root samples from cattle	Allele specific PCR with subsequent fluorescence detection
Gene variants at the SUOX locus of cattle (BVA genetic testing)	genomic DNA from blood, sperm, tissue and hair root samples from the horse	Allele specific PCR with subsequent fluorescence detection
Restriction Fragment Length Polymorphisms (RFLP)		
Gene variants at the MSHR locus of cattle (red factor test)	genomic DNA from blood, sperm, tissue and hair root samples from cattle	PCR-RFLP

Analyte (measure)	Test material (matrix)	Testing method
Gene variants at the MC1R locus of the horse (red factor test)	genomic DNA from blood, sperm, tissue and hair root samples from the horse	PCR-RFLP
Gene variants at the PMEL17 locus of the horse (silver dapple)	genomic DNA from blood, sperm and hair root samples from the horse	PCR-RFLP
Gene variants at the SW2 locus of the horse (Splashed White)	genomic DNA from blood, sperm, tissue and hair root samples from the horse	PCR-RFLP
Gene variants at the sodium-channel locus of the horse (HYPP genetic testing)	genomic DNA from blood, sperm, tissue and hair root samples from the horse	PCR-RFLP
Gene variants at the CD 18 locus of cattle (BLAD genetic testing)	genomic DNA from blood, sperm, tissue and hair root samples from cattle.	PCR-RFLP
Gene variants at the FVT1 locus of cattle (SMA genetic testing)	genomic DNA from blood, sperm, tissue and hair root samples from cattle	PCR-RFLP
Gene variants at the SPAST locus of cattle (SDM genetic testing)	genomic DNA from blood, sperm, tissue and hair root samples from cattle	PCR-RFLP
Gene variants at the Kappa casein locus of cattle	genomic DNA from blood, sperm, tissue and hair root samples from cattle	PCR-RFLP
Gene variants at the FUT1 locus of pig (E.coli F18)	genomic DNA from blood, sperm, tissue and hair root samples from pig	PCR-RFLP

Type of Test: Amplification Method *

Sequence-specific detection by oligonucleotide chips

Analyte (measure)	Test material (matrix)	Testing method
Genotyping (cattle)	genomic DNA from blood, sperm, tissue and hair root samples from cattle	Whole-Genome Genotyping Array, Illumina BeadChip BovineSNP50
Genotyping (pig)	genomic DNA from blood, sperm, tissue and hair root samples from pig	Whole-Genome Genotyping Array, Illumina BeadChip PorcineSNP60