Deutsche Akkreditierungsstelle

Annex to the accreditation certificate D-PL-13372-01-01 according to DIN EN ISO/IEC 17025:2018

Valid from: **22.08.2025**

Date of issue: 03.11.2025

This annex is part of the accreditation certificate D-PL-13372-01-00.

Holder of the accreditation certificate:

Eurofins Genomics Europe Food/Environment/White Biotech Products & Services GmbH
Anzinger Str. 7a, 85560 Ebersberg

with the location

Eurofins Genomics Europe Food/Environment/White Biotech Products & Services GmbH
Anzinger Str. 7, 85560 Ebersberg

The testing laboratory meets the requirements of DIN EN ISO/IEC 17025:2018 to carry out the conformity assessment activities listed in this annex. The testing laboratory meets additional legal and normative requirements, if applicable, including those in relevant sectoral schemes, provided that these are explicitly confirmed below.

The management system requirements ofDIN EN ISO/IEC 17025 are written in the language relevant to the operations of testing laboratories and they conform to the principles of DIN EN ISO 9001.

Tests in the fields:

Molecular biological analysis of food, feed and environmental samples, fitment and utensils in food areas;
Veterinary medicine
Genetics (molecular genetics, parental testing)

Flexible scope of accreditation:

Within the test areas indicated, the testing laboratory is permitted, without being required to inform and obtain prior approval from DAkkS

[Flex B] To have the free choice of standardised or equivalent test methods.

[Flex C] To modify, develop or further develop test methods.

The test methods listed are examples. The testing laboratory has an up-to-date list of all test methods within the flexible scope of accreditation. The list is publicly available on the website of the testing laboratory.

1 Molecular biological analysis of food and feed

1.1 Extraction of nucleic acid sequences for molecular biological analysis of food and feed [Flex B]

Macherey & Nagel NucleoSpin® Food Kit 8 740975 2023-09	Isolation of DNA from food and feed
Macherey & Nagel NucleoSpin® Food Kit 96 740976.2 2023-11	Isolation of DNA from food and feed
Promega Maxwell® RSC PureFood GMO and Authentication Kit AS1600 2023-07	Isolation of DNA from food and feed

Magtivo MagSi-DNA EF Customized BULK Kit MDKT0027 2016-09	Isolation of DNA from food and feed

1.2 Detection of nucleic acid sequences for determination of animal species and the sex of cattle using PCR in food [Flex C]

SOP_APG_div.Speziestests_ BJTUN_3.0 2022-03	Detection of *Thunnus* spp. and *Katsuwonus pelamis* using qualitative real-time PCR and sequencing of the CytoB and NADH dehydrogenase regions (Restriction: *Here using PCR*)
SOP_APG_Rind_Geschlecht sbestimmung _2.0 2022-02	Determination of sex or diagnosis of freemartinism in cattle using PCR

1.3 Detection of nucleic acid sequences for determination of plant species and animal species using automatic fragment length analysis in food and feed [Flex C]

SOP_APG_GenoReis_8.0 2021-12	Genotyping of genomic DNA from rice grains using microsatellites to determine varietal purity
SOP_APG_div.Speziestests_ BJ034_5.0 2024-04	Quantitative detection of common wheat in durum wheat by fragment length analysis
SOP_APG_Genotyp- Schaf_5.0 2020-03	Genotyping of sheep by microsatellite analysis of genomic DNA
SOP_APG_div.Speziestests_ BJ0SW_3.0 2024-04	Typing of spelt grains, spelt flour and spelt products for the presence of any contamination with wheat

1.4 Detection of nucleic acid sequences for determination of plant species, animal species, bacteria and fungi by sequence analysis in food [Flex C]

SOP_APG_div.Speziestests_ 4.0 2023-04	Qualitative determination of species from biological sample materials by DNA sequence analysis of mitochondrial, chromosomal or plastid DNA segments, fragment length analysis and/or real-time PCR (Restriction: *Here only sequence analysis*, *here only for food*)
SOP_APG_div.Speziestests_ BJ00F_3.0 2023-03	Qualitative detection of a fungal species from various material by sequencing of different sequence regions

1.5 Detection of nucleic acid sequences for determination of plant species and animal species using real-time PCR in food and feed [Flex C]

SOP_APG_div.Speziestests_ 4.0 2023-04	Quantitative determination of species from biological sample materials by DNA sequence analysis of mitochondrial, chromosomal or plastid DNA segments (real-time PCR amplification of species-specific gene loci with specific primer pairs) (Restriction: *Here using real-time PCR*, *here only for food and feed*)
SOP_APG_div.Speziestests_ BJ00T und weitere_3.0 2024-04	Detection of cow, pig, horse, sheep, goat, chicken, turkey, deer, donkey, buffalo and duck from blood and meat samples as well as processed meat products using real-time PCR
SOP_APG_div.Speziestests_ BJF11_2.0 2024-03	Qualitative real-time PCR for detection of 11 fish species
SOP_APG_div.Speziestests_ BJ0BP_2.0 2024-03	Qualitative detection of chicken, turkey, duck and goose using real-time PCR
SOP_APG_div.Speziestests_ BJTUN_3.0 2022-03	Detection of *Thunnus* spp. and *Katsuwonus pelamis* using qualitative real-time PCR and sequencing of the CytoB and NADH dehydrogenase regions (Restriction: *Here using real-time PCR*)

1.6 Detection of wheat and spelt in food using KASP™ Assay

SOP_APG_div.Speziestests_ BJ0SW_3.0 2024-04	Qualitative and quantitative detection of wheat in spelt by fragment length analysis, KASP and/or sequencing

1.7 Preparation of sequencing for determination of bacteria, fungi, plant species and animal species using next generation sequence analysis in food and evaluation of the sequences [Flex C]

SOP_APG_SpeziesNGS_4.0 2023-07	Determination of species from biological sample materials by next generation sequence analysis of mitochondrial, plastid, chromosomal or microbial DNA segments (Restriction: *Subcontracted sequencing*, *here only for food*)
SOP_APG_NGS_ BJNGA_7.0 2024-03	Detection of one or more animal species from biological sample materials by next generation sequence analysis of the CytoB, COI and 16 S regions (Restriction: *Subcontracted sequencing*, *here only for food*)
SOP_APG_NGS_BJNGF_5.0 2023-01	Detection of one or more fish species from biological sample materials by next generation sequence analysis of the CytoB and 16S regions (Restriction: *Subcontracted sequencing*, *here only for food*)
SOP_APG_NGS_BJNGM_10.0 2024-03	Detection of one or more bacterial species from biological sample materials by next generation sequence analysis of variable regions of the 16 S gene (Restriction: *Subcontracted sequencing*, *here only for food*)

2 Molecular biological analysis of fitment and utensils in food areas

SOP_APG_div.Speziestests_BJ059_3.0 2024-04	Qualitative detection of cow, pig, horse, sheep, goat, chicken and turkey in highly processed samples and wipe samples using real-time PCR of mitochondrial targets and 16S sequencing (Restriction: *Here only for fitment and utensils in food areas*)

3 Veterinary medicine

Test area: Genetics (molecular genetics, parental testing)

Type of test: Amplification method (direct detection of target sequences in the test material) [Flex C]

Analyte (measurand)	Test material (matrix)	Test technique
Prion protein genotyping, PRP 1 gene	Whole blood or tissue samples from sheep	PCR, sequence-specific detection of amplification products, qualitative by DNA sequencing

Analyte (measurand)	Test material (matrix)	Test technique
Qualitative determination of species	Mitochondrial DNA isolated from meat or fish	PCR, sequence-specific detection of amplification products, qualitative by DNA sequencing
Qualitative determination of species	Genomic and plastid DNA isolated from tissues of animals, plants, bacteria or fungi (Restriction: *Here only for animal matrices*)	PCR, sequence-specific detection of amplification products, qualitative by DNA sequencing
Genotyping for diagnosis of freemartinism or determination of sex in cattle	Genomic cattle DNA from blood or oral cavity scrapings and trace carriers with bovine cell material	PCR, sequence-specific detection of amplification products, qualitative by DNA sequencing
Genotyping of dogs	Genomic dog DNA from blood or oral cavity scrapings and trace carriers with canine cell material	PCR, detection of amplification products by microsatellite analysis (fragment length analysis)
Genotyping of cats	Genomic cat DNA from blood or oral cavity scrapings and trace carriers with feline cell material	PCR, detection of amplification products by microsatellite analysis (fragment length analysis)
Genotyping of cattle	Genomic cattle DNA from blood or oral cavity scrapings and trace carriers with bovine cell material	PCR, detection of amplification products by microsatellite analysis (fragment length analysis)
Genotyping of horses	Genomic horse DNA from blood or hair and trace carriers with equine cell material	PCR, detection of amplification products by microsatellite analysis (fragment length analysis)
Genotyping of sheep	Genomic sheep DNA from blood or oral cavity scrapings and trace carriers with ovine cell material	PCR, detection of amplification products by microsatellite analysis (fragment length analysis)
Genotyping of cell lines to determine authenticity	Cell pellets or genomic DNA	PCR, detection of amplification products by microsatellite analysis (fragment length analysis)
Typing of goats for scrapie resistance	Genomic goat DNA from blood or ear tissue	PCR, sequence-specific detection of amplification products, qualitatively using SNP, melting curve analysis

Analyte (measurand)	Test material (matrix)	Test technique
Typing of sheep for scrapie resistance	Genomic sheep DNA from blood or ear tissue	PCR, sequence-specific detection of amplification products, qualitatively using SNP, melting curve analysis

Abbreviations used:

DIN	Deutsches Institut für Normung e.V. (German Institute for Standardization)
EN	European standard
IEC	International Electrotechnical Commission
ISO	International Organization for Standardisation
SOP…	In-house method of Eurofins Genomics Europe Food/Environment/White Biotech Products & Services GmbH