

## **Rapid & Reliable Identification of Meat Species by Real-Time PCR**

**Providing Quicker and more Reliable  
Results**

The recent issues of horsemeat adulteration have highlighted the need for reliable species identification to ensure confidence in the supply chain and regulatory compliance.

Eurofins offers several accredited specialist services for meat species testing using qualitative, 1% threshold as well as semi-quantitative approaches.



## Fast & Reliable Results

Eurofins meat species testing is offered as ISO17025 accredited, qualitative or semi-quantitative test on the basis of Real-Time PCR and DNA sequencing as well as ELISA test using specific antibodies. The combination of independent test methods together with long-term experience in this testing area, allows Eurofins to reliably determine contamination of meat at low levels.

**Please find a detailed overview on our analytical offer on the next page.**

## Matrix & Species

The DNA and ELISA tests are applicable to various matrices including raw, processed and cooked products. Methods are also available for analysis of highly processed meats where the DNA may be significantly degraded.

Eurofins routinely tests for:

- Beef
- Pork
- Goat
- Sheep
- Horse
- Donkey
- Turkey
- Chicken
- Duck
- Buffalo
- Red Deer

## Qualitative Testing of other Vertebrates

Qualitative testing for seafood (e.g. salmon, perch, plaice, hake, haddock, sole, flounder, herring, whiting, pollock, sturgeon, prawns, shrimps, mussels, molluscs, lobster, etc.) and other animals (e.g. game, venison, hare, pheasant, wild boar, elk, camel, rabbit, mouse, rat, cat, dog, human, crocodile, ostrich, kangaroo, lizards and further exotic animals) by DNA sequencing as well as specific real-time PCR approaches is established.



## Eurofins Quality

- Competence Centres with latest state-of-the-art technology
- Local contacts with global network
- Providing accurate results on time
- Large capacity of several 1000 samples per day
- Accreditation according to DIN EN ISO/IEC 17025:2005 or analogous local standards
- Quality assurance by permanent participation in interlaboratory tests
- Officially authorised experts for control tests acc. to § 43 LFGB

## Additional Services

- Sampling on site according to international standards
- Comprehensive fish species testing service
- Eurofins TAG™ - a traceability system that allows to trace meat back to the individual animal
- Labelling control and advice
- Consultancy and auditing on HACCP
- Sample registration, tracking and test report online (EOL)

## Our analytical offer

METHOD	FEATURES	TURN-AROUND-TIMES	TEST-CODES
<p>Semi-quantitative Real-Time PCR (for 3, 7, 8, 9 or 11 species) + confirmation by DNA Sequencing</p> <p>Species List: Beef, buffalo, pork, horse, donkey, sheep, goat, chicken, turkey, duck, red deer</p>	<ul style="list-style-type: none"> <li>Quantitative result for DNA amount of species contained (percentage range)</li> <li>Very low quantification limits (down to 0.01% DNA:DNA)</li> <li>Confirmation of identified species with an independent additional method (sequencing of mitochondrial DNA)</li> </ul>	<p>Standard 7 days (Rush available: 3 days)</p>	<p>BJ0T3 BJ0X3 BJ00T BJ00X BJ0T8 BJ0X8 BJT8A BJX8A BJT8B BJX8B BJT8D BJX8D BJ0T9 BJ0X9 BJT11 BJX11</p>
1% threshold analysis	<ul style="list-style-type: none"> <li>Analysis according to the protocols published by the EURL-AP</li> <li>Reporting at a threshold of 1%</li> </ul>	<p>Standard 5 days (24h and "same day" are available on request)</p>	<p>PAAQH PGS0Z</p>
Qualitative Real-Time PCR (1 or 2 species)	<ul style="list-style-type: none"> <li>Qualitative result (yes/no)</li> <li>Very low limit of detection (0.01%*)</li> <li>Very short turn-around-times: "same day"-analysis</li> </ul>	<p>Standard 3 days (24 h and "same day" available)</p>	<p>PGS2W PJK2H PGS3W</p>
Qualitative Real-Time PCR EURL-AP	<ul style="list-style-type: none"> <li>Method published by the "European Union Reference Laboratory for Animal Proteins" in feedingstuffs</li> </ul>	<p>Standard 5 days (24h and "same day" available on request)</p>	<p>PAADH</p>
ELISA	<ul style="list-style-type: none"> <li>Screening test</li> <li>Very cost effective</li> <li>Very short turn-around-times: "same day"-analysis</li> </ul>	<p>Standard 6 days (48h available)</p>	<p>JK07H AAE0P</p>