



Animal Species Identification

The identification of animal species in food and feed products has gained increasing importance due to concerns related to public health, economic fraud, and legal compliance. This demand is further driven by religious and ethical considerations, which may be compromised in cases of food adulteration.

To ensure product authenticity, food testing laboratories require reliable and highly sensitive methods capable of detecting specific animal traits—even in highly processed samples. Such methods are essential for identifying the substitution of premium products, like turkey meat or buffalo mozzarella, with lower-cost alternatives such as chicken meat or cow's milk.

For vegetarian or vegan products, these testing methods play a critical role in confirming the absence of animal-derived ingredients, thereby maintaining consumer trust and adhering to labeling regulations.

DNA^{Animal} Product Line: Sensitive and Specific Real-Time PCR Kits

The DNA^{Animal} product line including **Screen** and **Ident** kits offers a comprehensive range of highly sensitive real-time PCR kits designed for the detection of most common domestic animal species, as well as specialized applications such as halal compliance testing. Most DNA^{Animal} kits are capable of detecting species or taxonomic groups with a **sensitivity as low as 0.01%**.

To further enhance laboratory efficiency, Gold Standard Diagnostics has developed the **DNA^{Animal} Mplex kits**. Together, these multiplex assays enable the simultaneous detection of up to 12 animal species, streamlining workflows and reducing time-to-result without compromising accuracy.

Key benefits of Animal Species kits

- Kits are validated on the most important cyclers
- Contain an IPC (internal positive control) to exclude false-negative results
- Have undergone extensive specificity and sensitivity validation
- Produce robust and reliable results
- DNA extraction kits available for different matrices
- Animal species DNA as positive control DNA is additionally available

DNAnimal Kits – Detection of Multiple Targets



Kit	Product Description	IPC	Quantity	Cat No
DNAnimal Screen Halal IPC (LR)	Detection of pork and horse & donkey species DNA	+	96 rxns	5422221210
DNAnimal Mplex Horse&Donkey/Cattle/Chicken	Detection of horse & donkey, cattle and chicken DNA	+	96 rxns	HU0070004
DNAnimal Mplex Goat/Pig/Bison	Detection of goat, pig and bison DNA	+	96 rxns	HU0070003
DNAnimal Mplex Water buffalo/Turkey/Sheep	Detection of water buffalo, turkey and sheep DNA	+	96 rxns	HU0070002
DNAnimal Mplex Rabbit/Muscovy Duck/Mallard Duck	Detection of rabbit, muscovy duck and mallard duck DNA	+	96 rxns	HU0070001

DNAnimal Screen Kits – Detection of One Target



Kit	Product Description	IPC	Quantity	Cat No
DNAnimal Screen Mammal & Bird IPC	Detection of mammalian and avian DNA	+	96 rxns	5422212110
DNAnimal Screen Ruminant IPC	Detection of ruminant DNA	+	96 rxns	5422221110
DNAnimal Screen Fish IPC	Detection of fish DNA	+	96 rxns	5422211310
DNAnimal Screen Bird IPC	Detection of avian DNA	+	96 rxns	5422211410

DNAnimal Ident Kits – Detection of One Target



Kit	Product Description	IPC	Quantity	Cat No
DNAnimal Ident Beef IPC	Detection of bovine DNA (<i>Bos taurus</i> , bison and other bos species)	+	96 rxns	5422220610
DNAnimal Ident Pork IPC	Detection of porcine DNA (both, <i>Sus scrofa domestica</i> and <i>scrofa</i>)	+	96 rxns	5422211910
DNAnimal Ident Pig HS IPC (LR)	Detection of porcine DNA (both, <i>Sus scrofa domestica</i> and <i>scrofa</i>) for low DNA samples (e.g. gelatin)	+	96 rxns	5422211810
DNAnimal Ident Chicken IPC (LR)	Detection of chicken (<i>Gallus gallus</i>) DNA	+	96 rxns	5422221010
DNAnimal Ident Duck IPC	Detection of duck (<i>Anas platyrhynchos</i> and <i>Cairina moschata</i>) DNA	+	96 rxns	5422220410
DNAnimal Ident Goose IPC	Detection of goose DNA	+	96 rxns	5422220810
DNAnimal Ident Turkey IPC	Detection of turkey DNA	+	96 rxns	5422211510
DNAnimal Ident Goat IPC	Detection of goat DNA	+	96 rxns	5422211610
DNAnimal Ident Sheep IPC	Detection of sheep DNA	+	96 rxns	5422211710
DNAnimal Ident Horse IPC (LR)	Detection of horse DNA	+	96 rxns	5422220110
DNAnimal Ident Water Buffalo IPC (LR)	Detection of water buffalo DNA	+	96 rxns	5422220910
DNAnimal Ident Donkey (LR)	Detection of donkey DNA	-	96 rxns	5422220210