

Detection of Animal Traces in Vegan Food

qPCR-based screening of animal DNA in food extracts



Outstanding Sensitivity

- qPCR-based assay for detection of animal DNA in food-derived extracts, down to a threshold level of 0.1 % of genomic meat target DNA.
- In combination with an optimized DNA extraction system for the isolation of genomic DNA from various vegan food types, the qPCR assay delivers fast and consistent results for a broad range of food matrices.

Simple and Rapid Protocols for Reliable Results

- Internal Control DNA to monitor the performance of both DNA extraction and qPCR.
- Lyophilized and pre-aliquoted (25 reactions) components to simplify logistics and storage.
- Ready-to-use products and straightforward workflows for routine use.

Background

A growing number of consumers adopt a vegetarian or vegan lifestyle, driven by health-, animal- and environment-related concerns. Along with the global rise of the vegan movement, the demand for meat-free food is exponentially increasing.

Yet, it is not always easy to ensure that foods declared as vegan have not in fact been processed with meat or animal-derived products.

ExtractNow™ Vegan Control

DNA extraction method for a broad range of food types as starting materials.

By using cutting-edge chemistry, the duration of the DNA purification is reduced to a minimum.

Principle

Spin filter columns

Type of Sample

ExtractNow™ Vegan Control can be used for extraction of genomic DNA from up to 50 mg of various potentially non-vegan food products (e.g. convenience foods, baked goods, cereals, chocolate, baking mixes, tofu, sauces, jams, bread spreads, soy milk, oils and fats).

Content

Spin columns, collection tubes, different buffers, proteinase K.

Specifications

Time to result: lysis approx. 60 minutes, extraction approx. 10 - 15 minutes.

Average purity: 1.8 - 2.0

Vegan Control™

qPCR kit for quick and sensitive detection of animal traces in DNA extracted from food.

Excellent performance when used in combination with our ExtractNow™ Vegan Control extraction kit for isolation of DNA from food products.

Principle

The assay is based on the TaqMan® principle and works with FAM™ and HEX™ labeled probes.

Target

The target sequence is a mitochondrial multi-copy gene (cytochrome b). Therefore, even very small amounts of DNA (down to 10 pg/PCR reaction) can be detected, leading to positive results.

Content

Lyophilized master mix (including primer sets for the detection of mammalian, avian and fish target DNA, probes, nucleotides and polymerase); Rehydration Buffer; Internal Control DNA; Positive Control DNA; PCR grade Water.

Sensitivity

Sensitive detection of animal-derived traces in vegan products down to a threshold level of 0.1 % genomic meat target DNA (in combination with ExtractNow™ Vegan Control).

With a DNA-based detection approach, the Vegan Control™ system and offers a quick, sensitive, and inexpensive solution to this problem. This assay system combines a qPCR-based Vegan Control™ kit to detect animal traces in food with a DNA extraction system optimized for food samples, ExtractNow™ Vegan Control.



Required Consumables & Lab Devices

Ethanol > 96 % abs., microcentrifuge, heat block, pipettes and filter tips.

Storage and Shelf Life

Store the proteinase K at +2 to +8 °C and the rest of the components at room temperature until the expiry date indicated on the label.



Recommended Use

For research use only! Not for use in diagnostic procedures.

Time to Result

Approx. 90 minutes.

Cyclers

Any qPCR cycler with FAM™ and HEX™ filters.

Storage and Shelf Life

The unopened components can be stored at +2 to +8 until the expiry date indicated on the label.

After rehydration, store at ≤ 18 °C.

Ordering Information

ExtractNow™ Vegan Control

Cat. No. 607-1010 10 extractions

Cat. No. 607-1050 50 extractions

Vegan Control™

Cat. No. 370-2025 25 reactions

Cat. No. 370-2100 100 reactions

How to order

Tel.: +49-30-2000437-0

E-mail: order@minerva-biolabs.com

Internet: www.minerva-biolabs.com