Universal Aspergillus Taqman qPCR Detection Kit (Catalog# TBS42020)

DESCRIPTION

The Universal Aspergillus qPCR Detection Kit is designed for identify the aspergillus DNA using Taqman-probe based real-time qPCR. The detection of target DNA confirms ingredient authenticity or prevents food fraud, ethical issues, or health concerns.

PRINCIPLE

Authenticating ingredients using real-time PCR is based on the amplification of a specific region of the relevant target genome. The amplified product is detected using target-specific fluorescent probes that bind to the amplified product. As the PCR product accumulates, there is an increased fluorescent signal from the bound probes. Monitoring the fluorescence intensities during the PCR run allows the detection of the accumulating PCR product in real time.

The Universal Aspergillus qPCR Detection Kit Assays include internal controls (Positive and Negative). These aids in the straightforward interpretation of the results (see the table "Summary of possible PCR outcomes").

APPLICATIONS

Detect aspergillosis-derived DNA in food and animal feed.

KIT CONTENT FOR 100 TESTS

Name	Volume
Tribo™ 2x Universal Aspergillus qPCP Mix	1.0 mL
10xPrime-Probe	200 µL
Positive Control	20 µL
Negative Control	20 µL

Sufficient reagent for 100 x 20µL

STORAGE CONDITIONS

The kit is shipped on ice and stored at -20°C for long-term storage. Shelf life of 12 months after receipt.

KEY FEATURES

❖ Highly sensitive and specific authentication of ingredients

❖ High efficiency: the optimal buffer condition and specific engineered Taq DNA polymerase have increased the efficiency of PCR amplifications.

❖ Streamlined protocol: Just add DNA Template.

❖ No cross reactivity with other species.

PCR PROTOCOL

1. Set up PCR reaction for each sample in 20 µL

Reaction Component	Volume (µL) Per Sample
Tribo™ 2x Universal Aspergillus qPCP Mix	10
10xPrimer-probe mix	2
DNA sample	1-3
Water	up to 20 µL

Internal control should be included as below: Positive Control and Negative Control.

Blank Control: no DNA template.

2. Suggested PCR conditions

Step	PCR Activation	PCR	
	1 cycle	CYCLE (40 cycles)	
		Denature	Anneal/ Extend
Temperature	95 °C	95 °C	60 °C
Time	3 min	15 sec	30 sec

DATA ANALYSIS

Positive Reaction: Sample Ct < or = 35， and Positive, Negative and Blank controls are normal.

Negative Reaction: Sample Ct > 35， and Positive, Negative and Blank controls are normal.

Repeat Reaction: If one of the control reactions is not normal, PCR reaction is failed, and should be repeated.

Relative Products

Aspergillus DNA Extraction Kit (TBS6009)
Aspergillus Niger qPCR Detection Kit (TBS42023)
Aspergillus Flavus qPCR Detection Kit (TBS42021)
Aspergillus Fumigatus qPCR Detection Kit (TBS42022)
Aspergillus Niger qPCR Detection Kit (TBS42023)
Aspergillus Terreus qPCR Detection Kit (TBS42024)
Real-time PCR mix for Cattle (TBS4201)
Real-time PCR mix for Goat (TBS4202)
Real-time PCR mix for Pig (TBS4203)
Real-time PCR mix for Horse (TBS4204)
Tribo™ Aflatoxin B1 test strip (TBS11166)

For research use only.

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