

Catalog Number	Kit Size
TBS42038-100	100 assays
TBS42038-200	200 assays

DESCRIPTION

4-Aspergillus Specific qPCR Kit is designed for specifically identifying 4 aspergillus species of A Flavus, A. Fumigatus, A. Niger and A. Terreus in a one PCR reaction tube using real-time quantitative polymerase chain reaction(qPCR) and specific probe fluorescence label. The probe labels are as below:

Cy3: A. Flavus; **Cy5:** A. Fumigatus.
Texas Red: A. Niger; **Fam:** A. Terreus.
Hex: internal control.

The Kit can be used in Bio-Rad, Thermofisher, Agilent, Roche LightCycler, and other multiple color real-time qPCR systems.

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.

4-Aspergillus qPCR Kit include all need for qPCR amplification: aspergillus positive, negative Controls, PCR internal controls, qPCR super mix, and prime-probe mix. These aids in the straightforward interpretation of the results. One test can identify 4 aspergillus targets in one tube.

KEY FEATURES

- ❖ Highly sensitivity and specificity for 4 aspergillus species.
- ❖ High efficiency: the optimal systemic conditions for PCR amplifications.
- ❖ Streamlined protocol: Just add DNA Template and water.
- ❖ No cross reactivity with other species.

APPLICATIONS

Detect aspergillus-derived DNA in plant, cannabis, cannabis ingredients, grain, food, herbals, and animal feed.

KIT CONTENTS

Name	100RXN	200RXN
qPCP Super Mix (A1)	0.8 mL	1.6 mL
Primer-probe Mix (A2)	0.6 mL	1.2mL
Positive Control DNA (A ⁺)	60 µL	120 µL
Negative Control DNA (A ⁻)	60 µL	120 µL

STORAGE CONDITION

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

PCR PROTOCOL

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

Reaction Component	Volume (µL)
qPCP Super Mix (A1)	7.0
Primer-probe Mix(A2)	5.0
DNA sample	5.0
Nuclease-free Water	3.0
Final Volume	20 µL

Internal control should be included as below: Positive Control (5 µL DNA /reaction) Negative Control (5 µL DNA/reaction)

2. Suggested PCR conditions

Step	Amplification	PCR	
	HOLD	CYCLE (40 cycles)	
		Denature	Anneal/ Extend
Temperature	95 °C	95 °C	60 °C
Time	2 min	15 sec	60 sec

DATA ANALYSIS

Positive Reaction: Sample Ct < or = 37 , and Positive, Negative and Blank controls are normal.

Negative Reaction: Sample Ct ≥ 38, and Positive, Negative and Blank controls are normal.

PCR internal control is positive in all samples, positive and negative controls. The positive response indicates a normal PCR amplification. Otherwise, the PCR reaction may be inhibited.

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

RELATIVE PRODUCTS

- TBS6025: Microbial DNA Magnetic Extraction
- TBS42025: 4-In-1Aspergillus qPCR
- TBS42026: O157H7 E. Coli qPCR
- TBS42027: STEC qPCR
- TBS42028: Salmonella qPCR
- TBS42029: STEC and Salmonella Multiple qPCR
- TBS42030: Mycoplasma Detection qPCR
- TBS42031: Listeria Monocytogen qPCR
- TBS42032: Listeria Genus qPCR
- TBS42033: Bacillus Cereus qPCR
- TBS42020: Universal Aspergillus qPCR
- TBS42021: Aspergillus Flavus qPCR
- TBS42022: Aspergillus Fumigatus qPCR
- TBS42023: Aspergillus Niger qPCR
- TBS42024: Aspergillus Terreus qPCR

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