Tribioscience

Cannabis Gender Detection qPCR Kit

Probe qPCR identify cannabis male/female in one reaction tube

Catalog Number	Kit Size
TBS42046-100	100 assays
TBS42046-200	200 assays

DESCRIPTION

Tribioscience's Cannabis Gender Detection qPCR Kit is designed for identifying cannabis male and female plants in a one PCR reaction using real-time quantitative polymerase chain reaction(qPCR) and probe fluorescence label. The kit provides a high fidelity, Accurate, sensitive, and time-saving method to identify cannabis plant gender.

The Cannabis Gender Detection qPCR Kit includes all of the essential components for qPCR amplification such as qPCR super mix, male-specific prime-probes (Fam), Cannabis/Hem specific primer-probe mix (Hex) as internal control, and cannabis female DNA control. All you need is to prepare DNA from cannabis plant sample.

KEY FEATURES

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

APPLICATIONS

Identify male and female cannabis plants.

KIT CONTENTS

Name	100RXN	200RXN
qPCP Super Mi	1.0 mL	2.0 mL
Primer-probe Mix	0.5 mL	1.0 mL
Cannabis Female Control	60 µL	120 µL
Cannabis Male Control	60 µL	120 µL

The Male DNA markers is labeled with FAM, and cannabis control is labeled with Hex.

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. **Plant DNA preparation**
   A small piece of leave or seeds can be lysed in 40 µL of lysis buffer of Fast DNA Extraction Kit (TBS6008) at 67℃, 7min, then 95 ℃ for 5 min, cooling to the RT. Spin the tube in the centrifuge. Take 1- 2 µL for qPCR reaction.

2. Set up PCR reaction as below:

Reaction Component	Volume (µL)
qPCP Super Mix	10
Primer-probe Mix	4
DNA sample	1~2
Nuclease-free Water	4~5
Final Volume	20 µL

Cannabis Female negative control, and male positive control should be included in the PCR amplification.

3. Suggested PCR conditions

Step	Amplification	PCR	
	HOLD	CYCLE (40 cycles)	
		Denature	Anneal/ Extend
Temperature	95 °C	95 °C	60 °C
Time	1 min	15 sec	60 sec

DATA ANALYSIS

Male Sample: Ct < or = 35， and cannabis internal controls are normal.
Female Samples: Sample Ct ≥ 35 or non-amplification, and cannabis internal control normal.
If cannabis internal control cannot be amplified, the PCR reaction is failed, and should be repeated.

RELATIVE PRODUCTS

TBS6025: Microbial DNA Magnetic Extraction
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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