

Lactobacillus qPCR Kit (TBS42056)

Probe qPCR Detecting Lactobacillus Species in One Reaction Tube

Catalog Number

TBS42056-100

TBS42056-200

Kit Size

100 assays

200 assays

DESCRIPTION

Lactobacillus is a genus of Gram-positive bacteria that includes many strains of probiotic microflora. These bacteria are known for producing lactic acid as their major fermentation end product. They are commonly found in dairy products, the gastrointestinal tracts of humans and animals, and various other habitats. To ensure precise identification and monitoring of these beneficial bacteria, the Lactobacillus qPCR Kit offers a reliable solution.

Tribioscience's Lactobacillus qPCR Kit has been designed specifically to identify lactobacillus species in a single PCR reaction using real-time quantitative polymerase chain reaction (qPCR) and FAM labeled probe. The detection of target DNA confirms ingredient authenticity and prevents food fraud, ethical issues, environment, or health concerns.

Tribioscience's Lactobacillus qPCR Kit includes all components for lactobacillus amplification besides testing samples. The kit includes a qPCR super mix, the primer-probe mix labeled with FAM for the target gene, positive control, negative control, and PCR internal control labeled with Hex. This aids in a straightforward interpretation of the results.

Alternative name: Pediococcus, Lactobacillus acidophilus, Acidophilus

KEY FEATURES

- ❖ High sensitivity and specificity for all lactobacillus 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 lactobacillus-derived DNA in plant, ingredients, grain, food, herbals, and animal feed.

KIT CONTENTS

Name	100x rxn	200x rxn
qPCR Super Mix (BL1)	0.8mL	1.6mL
Primer-probe Mix (BL2)	0.6mL	1.2mL
Positive Control DNA (BL ⁺)	60µL	100µL
Negative Control DNA (BL ⁻)	60µL	100µL

The Lactobacillus target probe has been labeled with **FAM** while the PCR internal control has been 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

DNA preparation is performed with suitable methods. We recommend our Microbial DNA Magnetic Extraction (TBS6025), and Dead Bacterial DNA Eraser (TBS6039).

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

Reaction Component	Volume (µL)
qPCR Super Mix (BL1)	7.0
Primer-probe Mix (BL2)	5.0
Nuclease-free Water	3.0
DNA sample	5.0
Final Volume	20µL

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

2. Suggested PCR conditions

Step	Amplification	PCR	
	HOLD	CYCLE (40x cycles)	
		Denature	Anneal/ Extend
Temperature	95°C	95°C	60°C
Time	1 min	15 sec	30 sec

DATA ANALYSIS

Positive Reaction: Sample Ct ≤ 37 w/ Positive, Negative and Blank controls normal.

Negative Reaction: Sample Ct ≥ 38 w/ Positive, Negative and Blank controls 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

TBS6039: Dead Bacterial DNA Eraser

TBS42024: Aspergillus Terreus qPCR

TBS42025: 4-In-1 Aspergillus qPCR

TBS42029: STEC and Salmonella Multiple qPCR

TBS42030: Mycoplasma Detection qPCR

TBS42031: Listeria Monocytogenes qPCR

TBS42032: Listeria Species qPCR

TBS42033: Bacillus Cereus Species qPCR

TBS42034: Bacillus Species qPCR

TBS42050: Staphylococcus-Pseudomonas Multiple qPCR

TBS42051: E. Coli and Salmonella Multiple qPCR

TBS42053: Bacillus Subtilis qPCR

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