

Bifidobacterium infantis qPCR Kit (TBS42061)

Probe qPCR Detecting Bifidobacterium infantis Species in One Reaction Tube

Catalog Number

TBS42061-100

TBS42061-200

Kit Size

100 assays

200 assays

DESCRIPTION

Bifidobacterium infantis is an anaerobic bacterium commonly found in the intestines of humans and animals. It has been shown to produce amylase and protease enzymes, generate organic acids, and exhibit antibiotic activity against pathogens like *E. coli* and *S. aureus*. To ensure precise identification and monitoring of these beneficial bacteria, the *B. infantis* qPCR Kit provides a reliable solution.

Tribioscience's *B. infantis* qPCR Kit has been designed specifically to identify *B. infantis* 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 *B. infantis* qPCR Kit includes all components for *B. infantis* 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: *B. infantis*; bi-26

KEY FEATURES

- ❖ High sensitivity and specificity for all *B. infantis* 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 *B. infantis*-derived DNA in ingredients, food, 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 *B. infantis* 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	94°C	94°C	60°C
Time	1 min	10 sec	60 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
 TBS42025: 4-In-1 Aspergillus qPCR
 TBS42029: STEC and Salmonella Multiple qPCR
 TBS42031: Listeria Monocytogenes qPCR
 TBS42032: Listeria Species qPCR
 TBS42033: Bacillus Cereus Species qPCR
 TBS42034: Bacillus Species qPCR
 TBS42053: Bacillus Subtilis qPCR
 TBS42054: Bacillus Licheniformis qPCR
 TBS42055: Bacillus Coagulans qPCR
 TBS42056: Lactobacillus qPCR
 TBS42057: Lactobacillus Acidophilus qPCR
 TBS42058: Lactobacillus Reuteri qPCR
 TBS42059: Bifidobacterium qPCR
 TBS42060: Bifidobacterium Longum qPCR

For research use only.