

Streptococcus species qPCR Kit (TBS42073)

Probe qPCR Detecting Streptococcus species in One Reaction Tube

Catalog Number

TBS42073-100

TBS42073-200

Kit Size

100 assays

200 assays

DESCRIPTION

Streptococcus species is a genus of gram-positive bacteria that belongs to the *Streptococcus* family. The Streptococcus Species qPCR Kit provides a reliable solution to detect streptococcus species in food or other samples.

Tribioscience's Streptococcus species qPCR Kit has been designed specifically to identify *streptococcus* 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 Streptococcus species qPCR Kit includes all components for *streptococcus* species 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: Probiotic

KEY FEATURES

- ❖ High sensitivity and specificity for all *streptococcus* 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 *streptococcus* species-derived DNA in plants, 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)	0.5mL	1.0mL
Positive Control DNA (BL ⁺)	60μL	100μL
Negative Control DNA (BL ⁻)	60μL	100μL

The *streptococcus* species 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. The shelf life is 12 months after receipt.

For research use only.

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)	4.0
Nuclease-free Water	4.0
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	PCR Amplification		
	Predenature	CYCLE (40x cycles)	
		Denature	Anneal/ Extend
Temperature	94°C	94°C	56°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 fails 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

TBS42050: Staphylococcus-Pseudomonas Multiple qPCR

TBS42051: E. Coli and Salmonella Multiple qPCR

TBS42053: Bacillus Subtilis qPCR

TBS42054: Bacillus Licheniformis qPCR

TBS42055: Bacillus Coagulans qPCR

TBS42056: Lactobacillus qPCR

TBS42057: Lactobacillus Acidophilus qPCR

TBS42058: Lactobacillus Reuteri qPCR

TBS42049: Bifidobacterium qPCR