Tribioscience

Streptococcus species qPCR Kit (TBS42073)

Probe qPCR Detecting Streptococcus species in One Reaction Tube

Catalog Number	Kit Size
TBS42073-100	100 assays
TBS42073-200	200 assays

DESCRIPTION

Streptococcus species belong to a genus of gram-positive bacteria in the family *Streptococcaceae*. The Streptococcus Species qPCR Kit provides a reliable solution for detecting *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 a FAM-labeled probe. The detection of target DNA confirms ingredient authenticity and prevents food fraud, as well as address ethical, environmental, and health concerns.

Tribioscience's Streptococcus Species qPCR Kit includes all components necessary for *Streptococcus* species amplification, except for the samples to be tested. The kit includes a qPCR super mix, a FAM-labeled primer-probe mix targeting the gene of interest, positive control, negative control, and a HEX-labeled internal PCR control. This allows for straightforward interpretation of results.

Alternative name: Probiotic

KEY FEATURES

- ❖ High sensitivity and specificity for all S*treptococcus* species.
- ❖ High efficiency: Optimized reaction conditions for PCR amplification.
- ❖ Streamlined protocol: Simply add the DNA template and water.
- ❖ No cross-reactivity with other species.

APPLICATIONS

Detect S*treptococcus* 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 S*treptococcus* 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 Coagulants qPCR
TBS42056: Lactobacillus qPCR
TBS42057: Lactobacillus Acidophilus qPCR
TBS42058: Lactobacillus Reuteri qPCR
TBS42049: Bifidobacterium qPCR

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