# [Cat. No.] K-2972

### Introduction

AccuPower® Staphylococcus aureus Real-Time PCR Kit is a product that can specifically detect Staphylococcus aureus (S. aureus) by real-time PCR.

S. aureus a gram-positive bacterium known as one of the causative agents of staphylococcosis. S. aureus is a zoonoses pathogenic to humans and livestock. S. aureus is transmitted through ingestion of contaminated food, and causes symptoms such as food poisoning, purulent infection, pneumonia, and enteritis.

This product contains all Real-time PCR components specific to *S. aureus*, including DNA polymerase, dNTPs, and reaction buffer. The users can easily prepare reaction mixture simply by adding template DNA, Oligo Mix and DEPC-D.W.

#### **Features & Benefits**

- Convenience: All necessary reactants for real-time PCR are included in a tube (i.e., Master Mix Type), allowing the users to perform reaction simply by adding template DNA, Oligo Mix, and DEPC-D.W.
- Sensitivity: By using BIONEER's HotStart Taq DNA Polymerase that minimizes non-specific reactions and maximizes reaction efficiency, only the target gene can be effectively amplified even with a trace amount of template DNA.

#### Components

Components	Amount
2X Master Mix	625µl x 2
Oligo Mix	500 µl
DEPC-D.W.	1.8 ml
Positive Control (1x108 copies/µI)	50 µl

<sup>\*</sup> Note: For research use only. Not for use in diagnostic or therapeutic procedures.

### Composition

	Composition	25 μl reaction
2X Master Mix	Taq DNA Polymerase	2 U
	dNTPs (dATP, dCTP, dGTP, dTTP)	Each 300 µM
	Reaction buffer with 2 mM MgCl <sub>2</sub>	1X
	S. aureus Forward primer	0.6 μΜ
Oligo Mix	S. aureus Reverse primer	0.6 μΜ
Oligo Iviix	S. aureus Probe (FAM)	0.6 μΜ
	ROX dye	1X

#### **Specifications**

Taq DNA Polymerase				
5'→3' exonuclease activity	Yes			
3'→5' exonuclease activity	No			
3'-A overhang	Yes			

## **Storage**

Store at -20°C. If stored in the recommended temperature, this product will be stable until the expiration date printed out on the label.

#### **Online Resources**



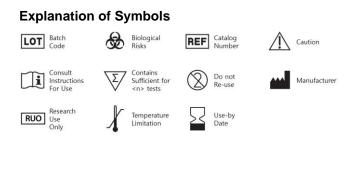
Visit our product page for additional information and protocols

# **Ordering Information**

Description	Cat. No.
AccuPower® Staphylococcus aureus Real-Time PCR Kit, 1.25 ml of 2X Master Mix solution, 100 tests	K-2972

# **Notice**

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# **Experimental Procedures**

	Steps	Procedure Details			
1	Preparation of reaction mixture	Thaw all components of <i>AccuPower®</i> Staphylococcus aureus Real-Time PCR Kit on ice and mix thoroughly before use. Then, briefly spin down all components.			
2	Composition of reaction mixture	2X Master Mix 12 Oligo Mix Template DNA 1 DEPC-D.W. Va		provided) referring  ount  5 µl  µl  5 µl  iable  6 µl	
3	Real-time PCR	3. Place PCR tubes or plate  4. Perform the reaction und  Step  Pre-denaturation  Denaturation  Annealing & Extension  * Note: Users can adjust the proptimal results.  5. After the reaction is compared.	Temperature  95°C  95°C  55°C  rotocol according to their	ons.  Time 5 min 10 sec 20 sec instrument and temp	Cycles 1 cycle 45 cycles

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