[Cat. No.] K-6863

Introduction

AccuPower® Enterococcus gallinarum Real-Time PCR Kit is a product that can specifically detect Enterococcus gallinarum (E. gallinarum) by real-time PCR.

E. gallinarum can cause sepsis, endocarditis, and meningitis in immunocompromised patients. E. gallinarum is one of the bacteria belonging to the Vancomycin-Resistant Enterococci (VRE). This resistance is due to a gene called vanC. This gene has a mechanism to encode the terminal protein of peptidoglycan, a component of the cell wall, by changing it from alanine to serine. This mechanism may result in low but vancomycin resistance.

This product contains all Real-time PCR components specific to E. gallinarum, including DNA polymerase, dNTPs, and reaction buffer. The users can easily prepare a 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 Tag 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 | 625 µl x 2 ea |
| Oligo Mix | 500 μΙ |
| DEPC-D.W. | 1.8 ml |
| Positive Control (1x10 ⁸ copies/µI) | 50 µl |

^{*} Note: For research use only. Not for use in diagnostic or therapeutic procedures.

Composition

| | 25 μl reaction | |
|------------------|---|-------------|
| | Taq DNA Polymerase | 2.5 U |
| 2X Master Mix | dNTPs (dATP, dCTP, dGTP, dTTP) | Each 300 µM |
| | Reaction buffer with 2 mM MgCl ₂ | 1X |
| | E. gallinarum Forward primer | 0.4 µM |
| Oligo Miy | E. gallinarum Reverse primer | 0.4 µM |
| Oligo Mix | E. gallinarum Probe (FAM) | 0.4 µM |
| | 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

Online Resources



Visit our product page for additional information and protocols

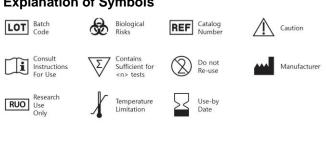
Ordering Information

| Description | Cat. No. |
|---|----------|
| AccuPower® Enterococcus gallinarum Real-Time | |
| PCR Kit, 1.25 ml of 2X Master Mix solution, 100 | K-6863 |
| tests | |

Notice

BIONEER corporation reserves the right to make corrections, modifications, improvements and other changes to its products, services, specifications or product descriptions at any time without notice.

Explanation of Symbols



Revision: 7 (2021-04-12)



Experimental Procedures

| | Steps | Procedure Details | | | |
|---|---------------------------------|--|------|--|--|
| 1 | Preparation of reaction mixture | Thaw all components of <i>AccuPower</i> ® Enterococcus gallinarum Real-Time PCR Kit on ice and mix thoroughly before use. Then, briefly spin down all components. | | | |
| 2 | Composition of reaction mixture | to the following list of com | 5 μl | | |
| 3 | Real-time PCR | 3. Place PCR tubes or plate on the Real-Time Quantitative thermal cycler. 4. Perform the reaction under the following conditions. Step Temperature Time Cycles | | | |