[Cat. No.] K-6828

Introduction

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

E. casseliflavus is a gram-positive bacterium that survives in almost all natural worlds. It can be isolated from various places such as soil, food, water, and animals, but similar to E. faecalis, it has low identification accuracy and isolation frequency. E. casseliflavus has low-dose resistance to the antibiotic vancomycin. For this reason, even if the antimicrobial susceptibility test shows vancomycin sensitivity, it may not be effective for the actual treatment. In case of invasive infection such as endocarditis or bacteremia caused by E. casseliflavus, it is important to administer appropriate treatment. This product contains all Real-time PCR components specific to E. casseliflavus, 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 µl		
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

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. casseliflavus Forward primer	0.4 μΜ
Oligo Mix	E. casseliflavus Reverse primer	0.4 µM
Oligo Iviix	E. casseliflavus 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

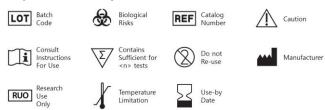
Ordering Information

Description	Cat. No.	
AccuPower® Enterococcus casseliflavus Real-Time PCR Kit, 1.25 ml of 2X Master Mix solution, 100	K-6828	
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 casseliflavus Real-Time PCR Kit on ice and mix thoroughly before use. Then, briefly spin down all components.			
2	Composition of reaction mixture	2. Add all components into PCR tubes (not provided) or a plate (not provided) referring to the following list of components (Based on 1 test). Components Amount 2X Master Mix 12.5 μl Oligo Mix 5 μl Template DNA 1-5 μl DEPC-D.W. Variable Total volume 25 μl			
3	Pre-denaturation 95°C 5 min 1 c				Cycles 1 cycle 45 cycles