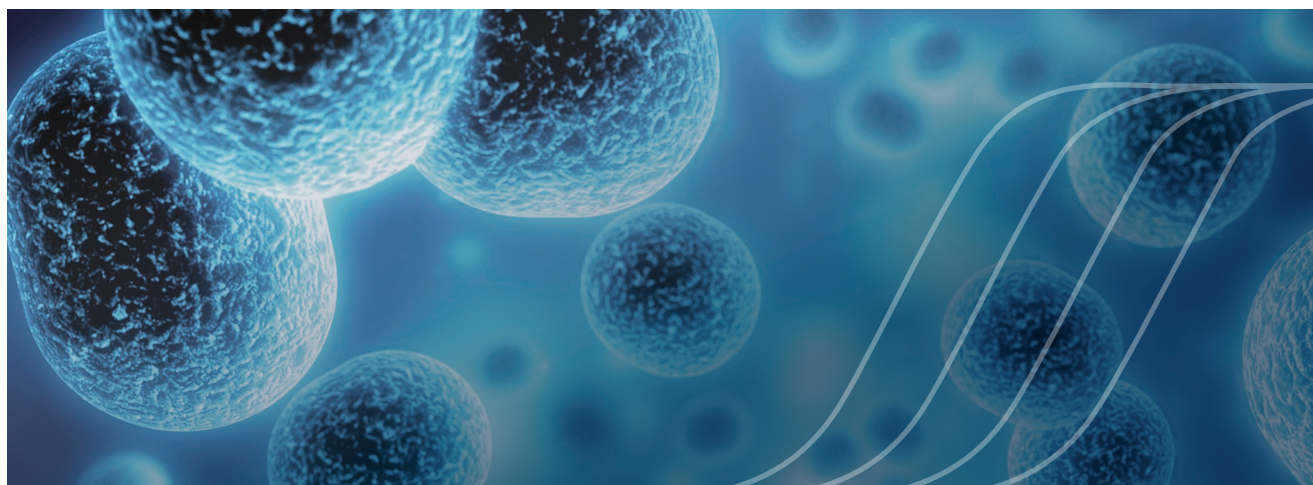


Cica Geneus™

Vancomycin Resistance Gene Real Time PCR Detection Kit

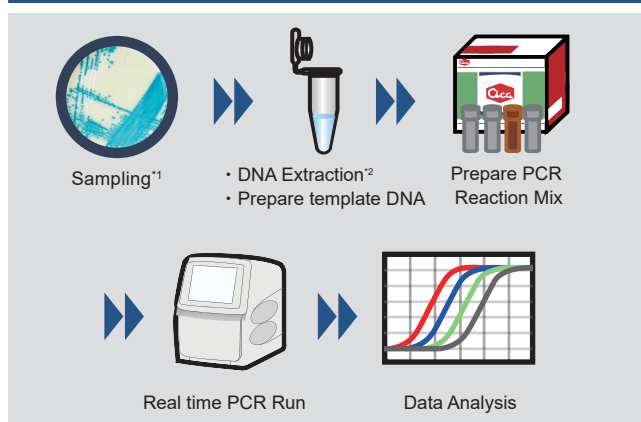


Vancomycin-resistant Enterococci (VRE) is Enterococci that have acquired resistance to vancomycin. VRE can cause nosocomial infections through contact transmission via humans or objects, so regular monitoring and infection control measures are required. VRE acquires vancomycin resistance by possessing such as VanA-type, VanB-type, and VanC-type vancomycin resistance genes. Among these, VanA-type and VanB-type vancomycin resistance genes are located on mobile genetic elements (transmissible plasmids and transposons), so there is a risk of resistance spreading to other *Enterococci* and bacterial species. On the other hand, VanC-type vancomycin resistance gene is species-specific (*vanC1*: *E. gallinarum*, *vanC2/3*: *E. casseliflavus*) and located on chromosomes, so they are not transmissible, and the degree of resistance is not strong, so they are not often a problem as nosocomial infections. This kit is a 4-plex real-time PCR assay that simultaneously detects vancomycin resistance genes *vanA*, *vanB*, and *vanC*, and an internal control (IC) to confirm the presence or absence of PCR inhibition.

Characteristics

- Simultaneous detection of vancomycin resistance genes *vanA*, *vanB*, and *vanC* is possible.
- The presence or absence of PCR inhibition can be confirmed by internal control.
- Detection is possible in about 1 hour by real-time PCR.

Work flow



Composition (30 rxns)

Reagent	Volume
A AptaTaq DNA Master (5×Conc.) *3	120 µL ×1
B PCR Supplement	180 µL ×1
C Primer/Probe Mix	150 µL ×1
D Positive Control	100 µL ×1

*1 CHROMagar™ VRE blue (08411-67) is recommended.

*2 Cica Geneus™ DNA extraction reagent is recommended.

*3 AptaTaq DNA Master (5×Conc.) is the product of Roche Diagnostics K.K.

Product information

Product name	Packaging size	Stored at	Product No.
Cica Geneus™ Vancomycin Resistance Gene Real Time PCR Detection Kit	30 rxns	-25~-20 °C	07440-96

Analyte/Fluorophore

Analyte	Fluorophore
vanA	FAM
vanB	VIC
vanC	ROX (Red610)
Internal Control	Cy5

Compatibility

Real-time PCR instruments compatible with
4 types of fluorescent dyes: FAM, VIC, ROX (Red610), Cy5

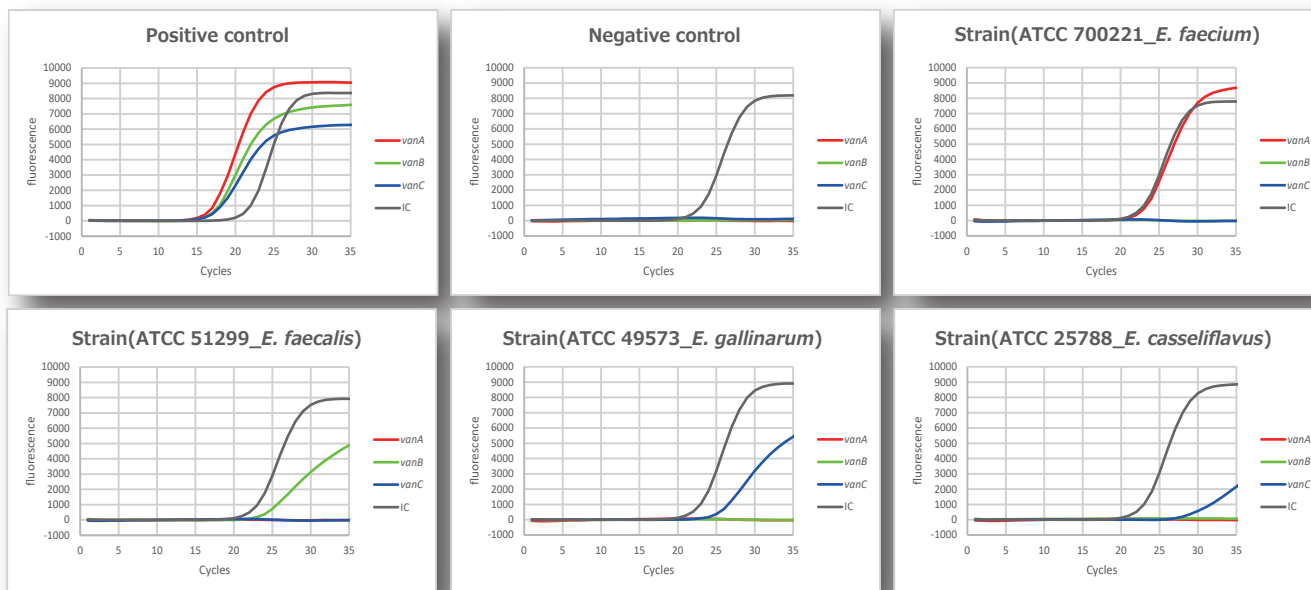
Compatibility (Based on internal test)

- Thermo Fisher Scientific: QuantStudio5
- Bio-Rad: CFX Opus 96
- Roche Diagnostics: LightCycler® 96
- Roche Diagnostics: cobas® z 480※

※Color compensation (fluorescent dye calibration) is essential.

Results

Amplification curve : Positive control (Reagent D) and TE buffer as a negative control and some strain were tested.



Equipment : CFX Opus 96

Related Products

Real-time PCR KIT

Product name	Packaging size	Stored at	Product No.
CicaGeneus™ CDtoxin Gene Real Time PCR Detection KIT Target genes : toxinA, toxinB, binary toxin	30 rxns	-25~-20 °C	07443-96
CicaGeneus™ MRSA Related Gene Real Time PCR Detection KIT Target genes : femA, mecA, blaZ, IC	30 rxns	-25~-20 °C	07512-96
CicaGeneus™ ESBL Genotype Real Time PCR Detection KIT Target genes : (TEM, SHV, CTX-M-1, CTX-M-9, CTX-M-2 or 8 or 25, GES(ESBL)) group, IC	30 rxns	-25~-20 °C	07498-96
CicaGeneus™ Carbapenemase Genotype Real Time PCR Detection KIT Target genes : (IMP-1 or 2, VIM, KPC, NDM, OXA-48-like, GES(carbapenemase)) group, IC	30 rxns	-25~-20 °C	07515-96

※Fluorophore : FAM, VIC, ROX (Red610), Cy5

DNA Extraction KIT

Product name	Packaging size	Stored at	Product No.
Cica Geneus™ DNA Extraction reagent	120 rxns	2~8 °C	08178-96

- Please use the products listed in the catalog as reagents (chemicals used for testing or research purpose).
- Product information is subject to change without notice. For the latest information, please have a look at our website "Cica-Web".

[Contact]



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Please scan for more product details!

