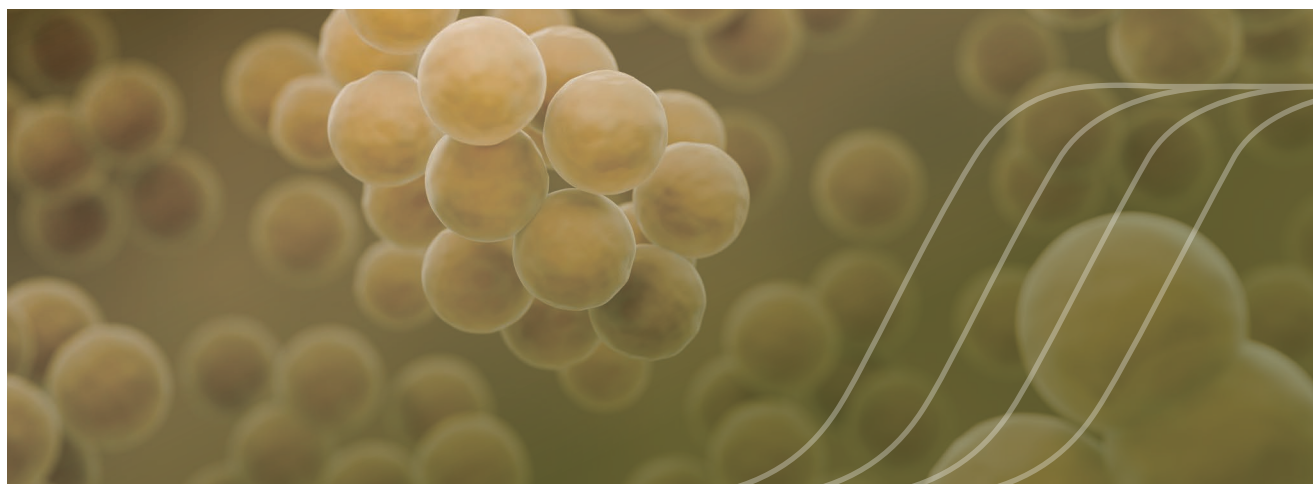


Cica Geneus™

MRSA Related Gene Real Time PCR Detection KIT

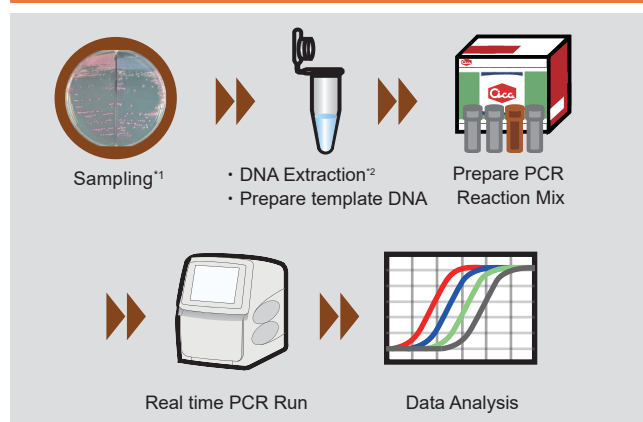


Methicillin-resistant *Staphylococcus aureus* (MRSA) is a strain of *Staphylococcus aureus* that has acquired resistance to methicillin and other β -lactam antibiotics. MRSA is a major cause of healthcare-associated infections and can cause hospital-acquired infections through human contact or object contact. Therefore, regular surveillance and infection prevention measures are essential. *Staphylococcus aureus* acquires *mecA* gene to become MRSA. Even if it does not possess the *mecA* gene, it can become penicillin-resistant *S. aureus* (PRSA) by acquiring *blaZ* gene. Therefore, detecting these genes is effective in predicting MRSA and PRSA. This kit is a 4-plex real-time PCR assay that simultaneously detects *femA* gene, which is specific to *S. aureus* and its closely related species (*S. aureus* complex), drug resistance genes *mecA* and *blaZ*, and an internal control (IC) to confirm the presence or absence of PCR inhibition.

Characteristics

- Simultaneous detection of *S. aureus* specific gene *femA*, drug resistance genes *mecA* and *blaZ* 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 Aptaq DNA Master (5×Conc.) ^{*3}	120 μ L ×1
B PCR Supplement	180 μ L ×1
C Primer/Probe Mix	150 μ L ×1
D Positive Control	100 μ L ×1

^{*1} CHROMagar™ MRSA/Staph aureus (72075) is recommended.

^{*2} Cica Geneus™ DNA extraction reagent is recommended.

^{*3} Aptaq DNA Master (5×Conc.) is the product of Roche Diagnostics K.K.

Product information

Product name	Packaging size	Stored at	Product No.
Cica Geneus™ MRSA Related Gene Real Time PCR Detection KIT	30 rxns	-25~-20 °C	07512-96

Analyte/Fluorophore

Analyte	Fluorophore
<i>femA</i> *4	FAM
<i>mecA</i>	VIC
<i>blaZ</i>	ROX (Red610)
Internal Control	Cy5

*4 *femA* is detected as a gene specific to *S. aureus* complex.

Compatibility

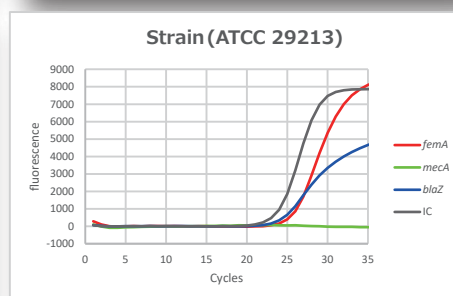
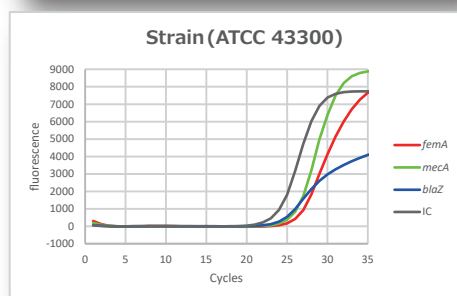
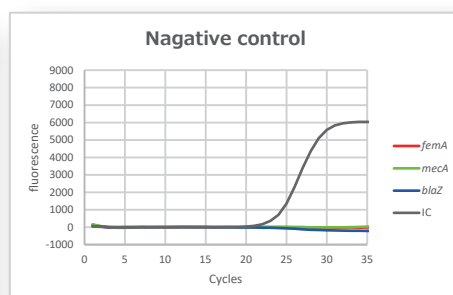
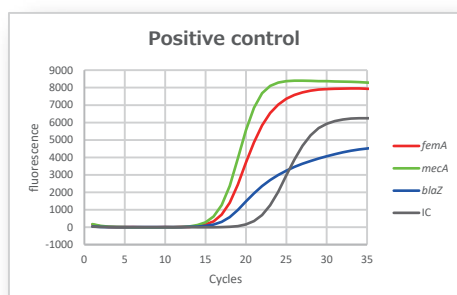
Real-time PCR instruments compatible with
4 types of fluorescent dyes: FAM, VIC, ROX (Red610), Cy5

Compatibility (Based on internal test)

- Thermo Fisher Scientific: QuantStudio5
- Bio-Rad: CFX Opus 96
- Roche Diagnostics: LightCycler® 96

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™ Vancomycin Resistance Gene Real Time PCR Detection KIT Target genes : <i>femA</i> , <i>mecA</i> , <i>blaZ</i> , IC	30 rxns	-25~-20 °C	07440-96
CicaGeneus™ CDtoxin Gene Real Time PCR Detection KIT Target genes : <i>toxinA</i> , <i>toxinB</i> , binary toxin	30 rxns	-25~-20 °C	07443-96
CicaGeneus™ ESBL Genotype Real Time PCR Detection KIT Target genes : (<i>TEM</i> , <i>SHV</i> , <i>CTX-M-1</i> , <i>CTX-M-9</i> , <i>CTX-M-2</i> or 8 or 25, <i>GES</i> (ESBL)) group, IC	30 rxns	-25~-20 °C	07498-96
CicaGeneus™ Carbapenemase Genotype Real Time PCR Detection KIT Target genes : (<i>IMP-1</i> or 2, <i>VIM</i> , <i>KPC</i> , <i>NDM</i> , <i>OXA-48</i> -like, <i>GES</i> (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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Website : <https://www.kanto.co.jp/english/>

Please scan for more product details!

