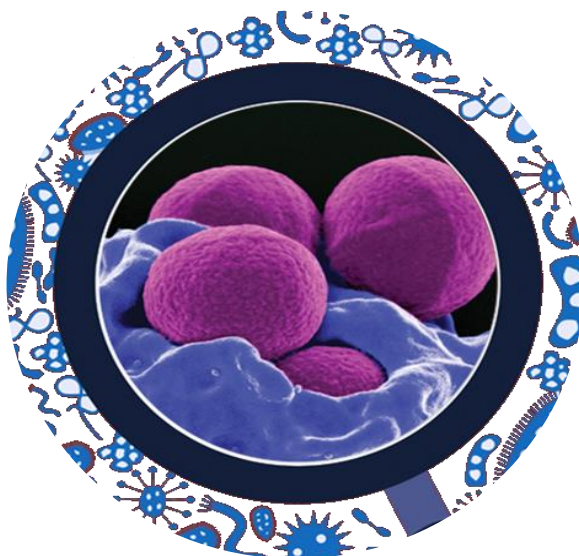


TRUPCR® MRSA Detection Kit

NEED

MRSA stands for methicillin-resistant *Staphylococcus aureus*, a type of bacteria that is resistant to several antibiotics including beta-lactam antibiotics. A review of 15 studies shows between 13 and 74% of worldwide *S. aureus* infections are MRSA. MRSA most often causes skin infections. In some cases, it causes pneumonia (lung infection) and other infections. If left untreated, MRSA infections can become severe and cause sepsis. MRSA is usually spread in the community by contact with infected people or things that are carrying the bacteria. Intensive care units are the harbinger of multidrug-resistant organisms including MRSA and are responsible for its spread within the hospital. Early treatment can help prevent the infection from further transmission and from getting worse.



SOLUTION BY TRUPCR®

TRUPCR® MRSA Detection Kit is an in vitro nucleic acid amplification test for the qualitative detection of *Staphylococcus aureus* and its Methicillin-Resistant/Susceptible status from various sources of clinical samples using Real time PCR.

This Kit is based on amplification of conserved region of the *Staphylococcus aureus* genome. There is a multiplexing reactions running in parallel in single tube to detect different targets with the help of four different dyes (FAM/Green, Yellow/HEX/VIC, Orange/ROX/TEX Red & Red/Cy5).

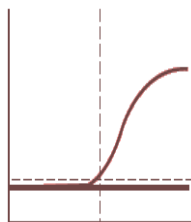
TARGET PATHOGENS

Primer Probe Mix-1

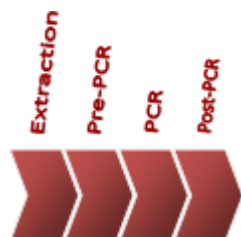
| FAM | HEX | TEX RED | Cy5 |
|------------------------------|------------------|------------------|------------------|
| <i>Staphylococcus aureus</i> | <i>MecA</i> gene | Internal Control | <i>mecC</i> gene |



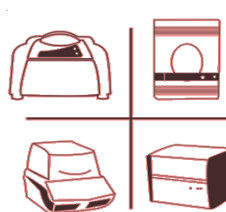
KEY FEATURES



Internal Control incorporated within the kit to ensure reliable results



Complete workflow solution available from Extraction of sample to Post-PCR analysis



Platform agnostic as compatible with various platforms



Rapid and reliable results within 100-120 minutes after PCR Start

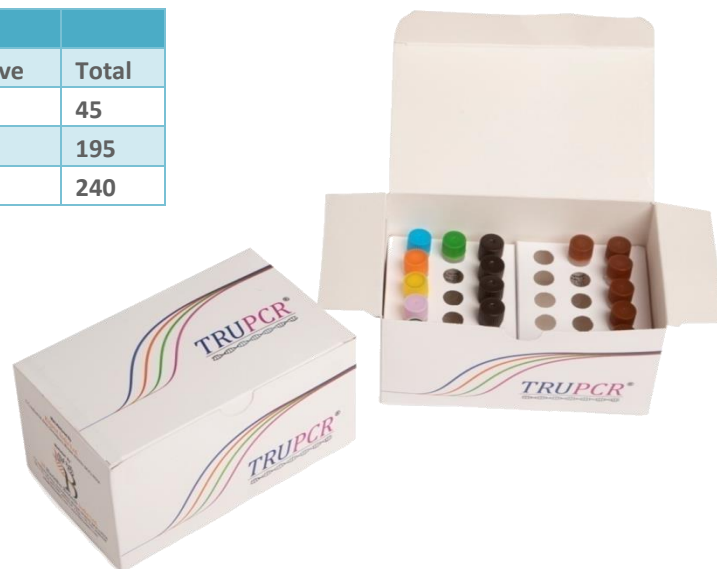
TECHNICAL SPECIFICATIONS

- Sample Type – BAL/Nasal Swab/ Sputum/CSF/Tracheal aspirate
- Target Regions –
 - *Staphylococcus aureus*: Conserved region of the genome
 - Methicillin-Resistant/Susceptible: *MecA* gene & *MecC* gene
- Validated on more than 500 clinical samples
- LoD: 10² CFU/ml
- Reaction Volume – 25µl in each tube
- Compatible Instruments – Applied Biosystems™ 7500 series, QuantStudio® 5, Bio-Rad CFX96, Rotor-Gene Q

CLINICAL DATA

| | | Reference Method | | |
|---------------|----------|------------------|----------|-------|
| | | Positive | Negative | Total |
| TRUPCR Method | Positive | 44 | 1 | 45 |
| | Negative | 2 | 193 | 195 |
| Total | | 46 | 194 | 240 |

| Parameters | Estimate |
|---------------------------|----------|
| Sensitivity | 95.80% |
| Specificity | 99.40% |
| Positive Predictive Value | 97.80% |
| Negative Predictive Value | 98.90% |



ORDERING INFORMATION

| Cat. No. | Description | Size |
|----------|----------------------------|--------------|
| 3B1283 | TRUPCR® MRSA Detection Kit | 48 Reactions |
| 3B1284 | TRUPCR® MRSA Detection Kit | 96 Reactions |