



# Rapid Molecular Methicillin-Resistant *Staphylococcus aureus* (MRSA) Screen, Nasal

## Test Highlights

- This test provides for a rapid and qualitative Real-time PCR detection of methicillin-resistant *Staphylococcus aureus* (MRSA) DNA from nasal swabs.
- The assay will presumptively identify MRSA colonization.

## Clinical Background

*Staphylococcus aureus* is a bacterium that causes a wide range of infections ranging from mild skin infections to the more severe cases of osteomyelitis, septicemia, toxic shock syndrome and endocarditis. The organism can also be found as normal flora on the skin, and may sometimes colonize in the nares of healthy individuals.

Methicillin resistant strains of *S. aureus* (MRSA) are resistant to beta-lactams, which include penicillin and cephalosporins, and may show resistance to other drug classes which potentially causes infections that are difficult to treat.

Community acquired infections may be the result of close contact sports, use of contaminated needles, or living in crowded environments (e.g. prisons). Hospitalized patients and those in long-term care facilities are at risk for nosocomial infections due to MRSA. The risk of transmission between patients or between patient and healthcare worker is increased if contact precautions are not taken as soon as an MRSA patient is identified.

## Indications for Ordering

Rapid MRSA Screening is advised for screening of patients prior to admission to a hospital or long-term care facility.

## Limitations

The assay is not intended to diagnose MRSA nor to guide or monitor for the treatment of MRSA infections.

A separate culture is required to recover organisms for requested susceptibility testing or for epidemiological strain typing.

## Methodology

Qualitative real-time PCR testing

## Ordering Information

Test Name	Test Code
Rapid Molecular MRSA Screen, Nasal	6203

## Specimen Requirements

Nasal swab collected with a Transystem Transport Swab.

## Specimen Stability

Ambient temperature (21-27°C) for up to 3 days  
Refrigerated (2-8°C) for up to 3 days

## Testing Schedule

Daily

NOTE: Turn-around-time is 2 hours from receipt in lab when ordered as a STAT.

**CPT Code** 87641

## References

**Mandell, G.L., et al**, Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases, 6<sup>th</sup> ed, Vol 1, Elsevier, 2005, pp 184-185.  
**American Academy of Pediatrics**, Staphylococcal Infections. In: Pickering, L.K., ed, *Red Book: 2003 Report of the Committee on Infectious Diseases*, 26<sup>th</sup> ed. Elk Grove Village, IL: American Academy of Pediatrics, 2003, pp561-573.