

MRSA ANTIBODIES AND PROTEIN (Methicillin Resistant Staphylococcus aureus)

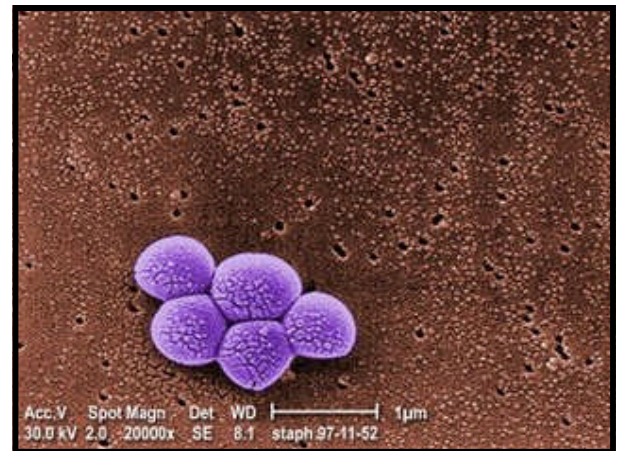


Figure 1. Left panel, Methicillin Resistant Staphylococcus aureus (MRSA) on blood agar. Right panel, scanning electron micrograph of MRSA (courtesy of *Centers for Disease Control*).

Reagents For MRSA Detection

- Reagents specific to PBP2a (Penicillin Binding Protein 2a)
- Six anti-PBP2a Monoclonals and Recombinant PBP2a.
- Matched Antibody Pairs for Detection of MRSA.
- Suitable for Immunoassay Development and Research
- Developed by DiNonA and available exclusively through CalBioreagents

MRSA Research Products

MRSA Background: *Staphylococcus aureus* is a ubiquitous bacteria found on skin and in nasal passages in approximately 1/3 of the U.S. population with 0.8% (2.3 million people) being carriers of Methicillin Resistant *S. aureus*.¹ MRSA are strains that have developed resistance to beta lactam antibiotics. Resistance to these antibiotics is mediated by the MRSA MecA gene and the resulting mutant penicillin binding protein 2a (PBP2a)².

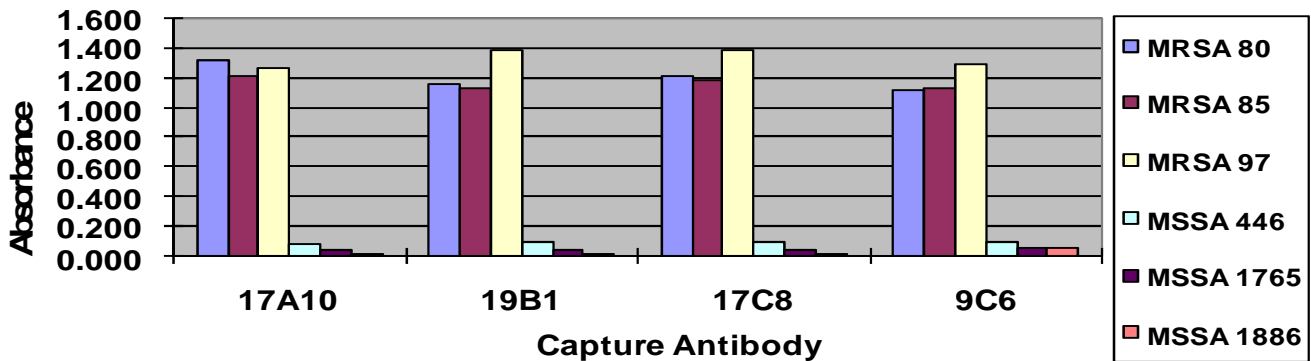
MRSA associated infections are an increasing problem in healthcare settings, with 2% of *S. aureus* infections being MRSA in 1974, 22% in 1995, and 64% in 2004³. In one study, MRSA accounted for 59% of skin and soft tissue infections in emergency rooms in 2004³. Invasive MRSA infections occur in approximately 100,000 persons in the U.S. per year and these infections are responsible for approximately 19,000 deaths per year⁴.

Development of assays to detect MRSA is possible with immunological reagents that can detect the PBP2a protein found in MRSA. A series of monoclonal antibodies specific for MRSA PBP2a have been developed by **DINONA, Inc.** (Korea). **These antibodies and the PBP2a protein are available exclusively through CalBioreagents.**

1. Kuehnert MJ et al., J. Infect. Dis. 2006;193:172-9
2. Lim D et al., Nat. Struct. Biol. 2002; 9(11): 870-6.
3. Klevens RM et al., Emerg. Infect. Dis. 2005;11:868-72.
4. Klevens RM et al., JAMA 2007;298(15):1763-1771.

MRSA Reagents

Product #	Source	Description
6G10	Mouse	PBP2a Monoclonal
19B1	Mouse	PBP2a Monoclonal
17A10	Mouse	PBP2a Monoclonal
17C8	Mouse	PBP2a Monoclonal
8A5	Mouse	PBP2a Monoclonal
9C6	Mouse	PBP2a Monoclonal
DP1011	Recombinant	PBP2a Protein



Antibody pairing for detection of PBP2a in MRSA. The above results demonstrate using each of the above clones as the coating antibody paired with 6G10 as the labeled reporter antibody. All antibody pairs are reactive with MRSA (3 separate isolates) and non-reactive for Methicillin sensitive isolates of *S. aureus* (MSSA, 3 isolates).

Products are for Research Use Only. Not intended for Diagnostic Procedures.
For Assay Development or Further Manufacturing.



DINONA Reagents are available exclusively through CalBioreagents



3182 Campus Drive, #368
San Mateo, CA 94403
Tel: 916-630-1475
FAX: 916-630-1477
Email: info@calbioreagents.com
Website: www.calbioreagents.com