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**Antibody to MRSA (*Staphylococcus aureus*)**  
**MOUSE MONOCLONAL**

**Catalog Number:** AB-533  
**Quantity:** 500 micrograms, 1 milligram  
**Format:** Lyophilized  
**Host:** Mouse  
**Isotype:** IgG1  
**Clone:** NYR-MRSA  
**Immunogen:** Gel-purified MRSA protein

**Background:**

Methicillin-resistant *Staphylococcus aureus* (MRSA) is resistant to beta lactam antibiotics such as penicillin, methicillin, and cephalosporins. MRSA can also be referred to as multiply-resistant *Staphylococcus aureus* or oxacillin-resistant *Staphylococcus aureus* (ORSA). Common strains of MRSA are EMRSA15 and EMRSA16. EMRSA16 is best described epidemiologically & found to be identical to the ST36:USA200 strain. Under the new international typing system, ST36:USA200 strain is now called MRSA252. It is not entirely certain why this strain has become so successful, whereas previous strains have failed to persist. One explanation is the characteristic pattern of antibiotic susceptibility. Both the EMRSA15 and EMRSA16 strains are resistant to erythromycin and ciprofloxacin. It is known that *Staphylococcus aureus* can survive intracellularly, and these are precisely the antibiotics that best penetrate intracellularly; it may be that these strains of *S. aureus* are therefore able to exploit an intracellular niche. Most cases of CA-MRSA are caused by a CC8 strain designated ST8:USA300, which carries *mec* type IV, Panton-Valentine leukocidin, PSM-alpha and enterotoxins Q and K, and ST8:USA400. Other community-associated strains of MRSA are ST8:USA500 and ST59:USA1000

**Specificity and Preparation:**

Mouse antibody is purified by ion exchange column. Protein concentration is 1mg/ml in PBS (after reconstitution). MRSA positive *S. aureus* may also be known as oxacillin-resistant *S. aureus* (ORSA) and multiple-resistant *Staphylococcus aureus*.

**Usage and Storage:**

Reported to be effective for direct ELISA, western blot, immunoprecipitation, immunohistochemistry, and affinity purification. Titer: by direct ELISA (against purified MRSA protein or MRSA positive *S. aureus* lysate), 1:5,000 dilution will yield 0.5 O.D (purified protein) and 0.2 O.D.(MRSA positive *S. aureus* lysate) using alkaline phosphatase conjugated rabbit anti-mouse Ig (Jackson Laboratories). Reconstitute with H<sub>2</sub>O. Gently spin down material before use; 5-10 seconds in a microfuge should be adequate. In lyophilized form, for long periods, store at 4°C in dry environment. After reconstitution, if not intended for use within a month, aliquot and store at -20°C. Antibody is stable for two years lyophilized, one month in solution at 4°C. Antibody is shipped lyophilized at ambient temperature.

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