

Staphylococcus aureus (8A3): sc-80945

BACKGROUND

Staphylococcus aureus is a Gram-positive coccus that frequently lives on the skin or in the nose of humans. This microbe produces β lactamase, enzymes which break down the β lactam ring of the penicillin molecule, making it resistant to most penicillin and cephalosporins. *Staphylococcus aureus* causes a broad range of illnesses, from minor skin infections and abscesses to life-threatening diseases such as pneumonia, meningitis, endocarditis, septicemia and toxic shock syndrome (TSS). Toxic shock syndrome toxin-1 (TSST-1) is a Staphylococcal secreted exotoxin that is responsible for TSS, since it leads to non-specific binding of MHC II with T cell receptors, resulting in polyclonal T cell activation. The toxin also plays a role in the pathogenesis of several autoimmune and allergic diseases associated with B cell hyperactivity, and it produces antagonistic effects on IL-4-induced IgE synthesis. Symptoms of TSS include high fever, accompanied by low blood pressure, malaise and confusion, which can rapidly progress to stupor, coma and multi-organ failure.

REFERENCES

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SOURCE

Staphylococcus aureus (8A3) is a mouse monoclonal antibody raised against UV-inactivated *Staphylococcus aureus*.

PRODUCT

Each vial contains 100 μ g IgM in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Staphylococcus aureus (8A3) is recommended for detection of *Staphylococcus aureus* by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.