



Staphylococcus aureus (703): sc-58037

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. TSST-1 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 (703) is a mouse monoclonal antibody raised against UV-inactivated *Staphylococcus aureus* cells.

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 (703) is recommended for detection of peptidoglycan of *Staphylococcus aureus* and *Staphylococcus epidermidis* origin 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 or our catalog for detailed protocols and support products.