

Anti-Lipoteichoic Acid Monoclonal Antibody

ORDERING INFORMATION

Catalog No.: 15711

Size: 500ug Protein G-purified antibody in PBS, pH 7.4.

BACKGROUND

Lipoteichoic acid (LTA) is the major proinflammatory structure present within the cell wall layer of most gram-positive bacteria. It plays an important role in the initiation and progression of bacterial infection, inflammation, and septic shock. LTA induces several cytokines *in vivo*, and LTA and peptidoglycan (PepG) synergize to cause the induction of nitric oxide formation which can lead to multiple organ failure. Since LTA is also found in the cell walls of non-pathogenic gram-positive bacteria, it has been suggested that the structure of LTA, and its ability to synergize with PepG, determines the ability of a particular bacterium to cause septic shock.

SPECIFICATION SUMMARY

Antigen: *Staphylococcus epidermidis*, Hay strain (ATCC #55133).

Host Species: Mouse

Antibody Class: IgG1

Stabilizers: None

Preservatives: None. Available on request.

SPECIFICITY

This antibody reacts with lipoteichoic acid of *Staph epidermidis*, Hay strain, as well as clinical strains of *Staph. epidermidis* (types I, II, and III), *Staph. aureus* strains 5 and 8, *Strep. pyogenes*, *Strep. fecaelis*, and *Strep. mutans*. It does not react with peptidoglycan of *Staph. aureus* or peptidoglycan-rhamnose, nor does it react with pneumococcal polysaccharides. This antibody does not cross-react with *E. coli* or *H. influenzae* type B.

APPLICATIONS

ELISA: use at 0.1-1.0 ug/ml (optimized for LTA on solid phase).

Opsonization assay: use at 80-160 ug/ml (optimized for *Staph. epidermidis*, Hay strain).

DILUTION INSTRUCTIONS

Dilute in PBS or medium which is identical to that used in the assay system.

STORAGE AND STABILITY

This antibody is stable for at least one (1) year at -20°C. Avoid multiple freeze-thaw cycles.

For in vitro investigational use only. Not for use in therapeutic or diagnostic procedures.