

Lipoteichoic Acid Antibody

Monoclonal Antibody

Product Information

Product No.: 15711
Clone: 96-110
Isotype: Mouse IgG1
Storage: -20°C

Product Description

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. fecalis, 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.

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.

Known Reactivity Species:

Gram-Positive Bacteria

Format:

Purified

Immunogen:

Staphylococcus epidermidis, Hay strain (ATCC #55133).

Formulation

This monoclonal antibody is formulated in phosphate buffered saline (PBS) pH 7.2 - 7.4 with no carrier protein or preservatives added.

Storage and Stability

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

Product Preparation

Antibodies are purified by a multi-step process including the use of protein A or G to assure extremely low levels of endotoxins, leachable protein A or aggregates.

Applications

Applications and Recommended Usage (Quality Tested By Leinco):

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).

Country of Origin

USA