

***Mycobacteria*, LAM Antibody**

Hybridoma Monoclonal Antibody

Product Information

Product No.: M222
Clone: MYCO-5936
Isotype: Rabbit IgG
Storage: Sterile 2-8°C

Product Description

Specificity:

Anti-*Mycobacteria* (Clone MYCO-5936) is specific for the lipoarabinomannan of several *Mycobacteria* species including *Mycobacterium tuberculosis* (6 strains), *M. bovis*, *M. smegmatis*, *M. leprae*, *M. avium*, *M. phlei*, & *M. parafortuitum*.

Background:

Mycobacterium is a diverse genus of bacteria that includes several pathogenic species responsible for causing diseases in humans, most notably *Mycobacterium tuberculosis*, the causative agent of tuberculosis (TB). *Mycobacteria* are characterized by their unique cell wall structure, which contains high levels of mycolic acids, making them resistant to many conventional antibiotics. In addition to *M. tuberculosis*, other medically important species include *Mycobacterium leprae*, responsible for leprosy, and *Mycobacterium avium* complex (MAC), causing opportunistic infections in immunocompromised individuals.

Mycobacterium cell walls also contain a glycolipid known as Lipoarabinomannan (LAM), which plays a significant role in pathogenesis. LAM helps the bacteria evade the host immune system and modulate the host's inflammatory response. Additionally, LAM has been used as a diagnostic marker for TB infection, as it can be detected in patient samples such as sputum and urine. Understanding the unique characteristics of *Mycobacterium* and the role of molecules like LAM is crucial for the development of effective diagnostic tools and therapeutic strategies to combat mycobacterial infections.

Known Reactivity Species:

Mycobacteria sp.

Format:

Purified

Formulation

Formulated in 0.01 M phosphate buffered saline, pH 7.2 and contains 0.1% sodium azide. Due to inherent biochemical properties of antibodies, certain products may be prone to precipitation over time. Precipitation may be removed by aseptic centrifugation and/or filtration.

Purity

≥90%

Storage and Stability

This purified antibody is stable when stored at 2-8°C. **Do not freeze.**

Product Preparation

This monoclonal antibody is purified by protein A chromatography or sequential differential precipitations.

Applications

Applications and Recommended Usage (Quality Tested By Leinco):

ELISA: 1:20-1:200,

IF: 1:10-1:50

Country of Origin

USA