

# ***Mycobacteria*, LAM Antibody**

## **Hybridoma Monoclonal Antibody**

### **Product Information**

**Product No.:** M221

**Clone:** MYCO-8061

**Isotype:** Rabbit IgG

**Storage:** Sterile 2-8°C

### **Product Description**

#### **Specificity:**

Anti-*Mycobacteria* (Clone MYCO-8061) 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