# MBL-A (A-13): sc-103616



The Power to Question

# **BACKGROUND**

MBL-A, also known as Mbl1 (mannose-binding lectin (protein A) 1) or RaRF p28B, is a 239 amino acid mouse protein that is localized predominately to the golgi apparatus and the rough endoplasmic reticulum and contains one collagen-like domain and one C-type lectin domain. Existing in an oligomeric complex composed of six homotrimers, MBL-A functions to bind N-acetyl-glucosamine and mannose in a Ca+-dependent manner and, via this interaction, is able to activate the classical complement pathway, thereby providing host defense against invasive pathogens. Due to its involvement in the innate immune system, MBL-A is involved in the pathogenesis of a variety of afflictions, including diabetes, acute septic peritonitis, asthma, cancer and bacterial and viral infections.

# **REFERENCES**

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- Walsh, M.C., et al. 2005. Mannose-binding lectin is a regulator of inflammation that accompanies myocardial ischemia and reperfusion injury. J. Immunol. 175: 541-546.
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# CHROMOSOMAL LOCATION

Genetic locus: Mbl1 (mouse) mapping to 14 B.

#### SOURCE

MBL-A (A-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MBL-A of mouse origin.

# **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **PRODUCT**

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-103616 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

MBL-A (A-13) is recommended for detection of MBL-A of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for MBL-A siRNA (m): sc-106208, MBL-A shRNA Plasmid (m): sc-106208-SH and MBL-A shRNA (m) Lentiviral Particles: sc-106208-V.

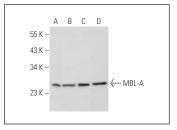
Molecular Weight of MBL-A: 25 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, KNRK whole cell lysate: sc-2214 or c4 whole cell lysate: sc-364186.

### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

# **DATA**



MBL-A (A-13): sc-103616. Western blot analysis of MBL-A expression in c4 ( $\bf A$ ), NIH/3T3 ( $\bf B$ ), KNRK ( $\bf C$ ) and PC-12 ( $\bf D$ ) whole cell lysates.

# **RESEARCH USE**

For research use only, not for use in diagnostic procedures.