# mMGL (T-20): sc-25007



The Power to Question

#### **BACKGROUND**

Mouse macrophage galactose and N-acetylgalactosamine-specific lectin (mMGL, also known as macrophage asialoglycoprotein-binding protein (M-ASGP-BP) or Macrophage galactose/N-acetylgalactosamine-specific lectin) has a molecular mass of 34-42 kDa. mMGL has galactose-binding activity and its sugar-binding specificity is same as that of the native lectin. It is suggested that mMGL may participate in the binding of the macrophages to tumor cells. mMGL serves as a unique macrophage marker in mouse lung tissue due to its topographical site-dependent pattern of expression. Additionally, the most intense signal is observed in the extract from skin, suggesting that cells expressing this lectin are abundant in skin. Cells which stain positively for mMGL are distributed in the connective tissue and in the interstice, particularly the dermis and subcutaneous layer of skin.

## **REFERENCES**

- Oda, S., et al. 1989. Binding of activated macrophages to tumor cells through a macrophage lectin and its role in macrophage tumoricidal activity. J. Biochem. (Tokyo) 105: 1040-1043.
- Ii, M., et al. 1990. Molecular cloning and sequence analysis of cDNA encoding the macrophage lectin specific for galactose and N-acetylgalactosamine. J. Biol. Chem. 265: 11295-11298.
- 3. Sato, M., et al. 1992. Molecular cloning and expression of cDNA encoding a galactose/N-acetylgalactosamine-specific lectin on mouse tumoricidal macrophages. J. Biochem. (Tokyo) 111: 331-336.
- 4. Kimura, T., et al. 1995. Calcium-dependent conformation of a mouse macrophage calcium-type lectin. Carbohydrate binding activity is stabilized by an antibody specific for a calcium-dependent epitope. J. Biol. Chem. 270: 16056-16062.
- Imai, Y., et al. 1995. Restricted expression of galactose/N-acetylgalactosamine-specific macrophage C-type lectin to connective tissue and to metastatic lesions in mouse lung. Immunol. 86: 591-598.
- Mizuochi, S., et al. 1997. Unique tissue distribution of a mouse macrophage C-type lectin. Glycobiol. 7: 137-146.

## **SOURCE**

 $\,$  mMGL (T-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of mMGL of rat origin.

## **PRODUCT**

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

Blocking peptide available for competition studies, sc-25007 P, (100  $\mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **STORAGE**

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

# **RESEARCH USE**

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

#### **APPLICATIONS**

mMGL (T-20) is recommended for detection of mMGL of rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

# **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) 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.

#### **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

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