**BACKGROUND**

Mannose (or mannan)-binding lectin (MBL), also known as serum mannose-binding protein (MBP), initiates the lectin branch of the innate immune response by binding to the surface of potentially pathogenic microorganisms and initiating complement fixation through an N-terminal collagen-like domain. MBL is a key component in immune response in that it can directly trigger neutralization of invading microorganisms by an Ab-independent mechanism. Mutations of human MBL are associated with immunodeficiency resulting from a reduction in the ability of the mutant MBL to initiate complement fixation. In human, three types of MBL-associated serine proteases, MASP-1, MASP-2 and MASP-3, and a truncated form of MASP-2 (small MBL-associated protein; sMAP or MAp19) complex with MBL to activate the lectin pathway of the complement system. Activated MASP1s subsequently cleave and activate downstream components of the complement pathway. MASP-3 is an alternatively spliced product from the MASP-1 gene and may function to inhibit MASP-2 by competing for MBL binding and inhibiting the activation of MBL-associated MASP-2.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: MASP2 (human) mapping to 1p36.22.

**SOURCE**

MASP-2 (B-10) is a mouse monoclonal antibody raised against amino acids 284-343 mapping within an internal region of MASP-2 of human origin.

**PRODUCT**

Each vial contains 200 μg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

MASP-2 (B-10) is available conjugated to agarose (sc-390200 AC, 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390200 HRP), 200 μg/ml, for WB, IHC/P and ELISA; to either phycoerythrin (sc-390200 PE), fluorescein (sc-390200 FITC), Alexa Fluor® 488 (sc-390200 AF488), Alexa Fluor® 546 (sc-390200 AF546), Alexa Fluor® 594 (sc-390200 AF594) or Alexa Fluor® 647 (sc-390200 AF647), 200 μg/ml, for WB (RGB), IF, IHC/P and FCM; and to either Alexa Fluor® 680 (sc-390200 AF680) or Alexa Fluor® 790 (sc-390200 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

MASP-2 (B-10) is recommended for detection of MASP-2 A chain of human origin by Western Blotting (starting dilution 1:100, 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 1:30-1:300).

Suitable for use as control antibody for MASP-2 siRNA (h): sc-42903, MASP-2 shRNA Plasmid (h): sc-42903-SH and MASP-2 shRNA (h) Lentiviral Particles: sc-42903-V.

Molecular Weight of MASP-2: 76 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Caki-1 cell lysate: sc-2224 or MIA PaCa-2 cell lysate: sc-2285.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:


**DATA**

**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.

**PROTOCOLS**

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