

# MASP-2 (N-20): sc-17905

## 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 MASPs 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.

## CHROMOSOMAL LOCATION

Genetic locus: MASP2 (human) mapping to 1p36.22; Masp2 (mouse) mapping to 4 E2.

## SOURCE

MASP-2 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of MASP-2 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-17905 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

MASP-2 (N-20) is recommended for detection of MASP-2 A chain of mouse, rat and human 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MASP-2 (N-20) is also recommended for detection of MASP-2 A chain in additional species, including bovine.

Suitable for use as control antibody for MASP-2 siRNA (h): sc-42903, MASP-2 siRNA (m): sc-42904, MASP-2 shRNA Plasmid (h): sc-42903-SH, MASP-2 shRNA Plasmid (m): sc-42904-SH, MASP-2 shRNA (h) Lentiviral Particles: sc-42903-V and MASP-2 shRNA (m) Lentiviral Particles: sc-42904-V.

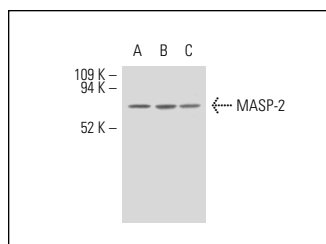
Molecular Weight of MASP-2: 76 kDa.

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

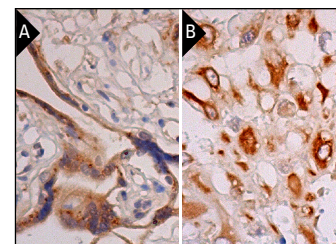
## RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



MASP-2 (N-20): sc-17905. Western blot analysis of MASP-2 expression in Caki-1 (A), HeLa (B) and MIA PaCa-2 (C) whole cell lysates.



MASP-2 (N-20): sc-17905. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic staining of trophoblastic cells (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic staining of decidual cells (B).

## SELECT PRODUCT CITATIONS

1. Imai, N., et al. 2006. Immunohistochemical evidence of activated lectin pathway in kidney allografts with peritubular capillary C4d deposition. *Nephrol. Dial. Transplant.* 21: 2589-2595.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **MASP-2 (B-10): sc-390200**, our highly recommended monoclonal alternative to MASP-2 (N-20).