

Maspin (C-20): sc-8543

BACKGROUND

Maspin is structurally a serine protease inhibitor (serpin) that was initially isolated from normal human mammary epithelial cells. Serpins are a family of proteins that inhibit Chymotrypsin-like serine proteinases. Serpins control activated proteinases and several are involved in the regulation of cell death. Maspin is found in the extracellular matrix and at the plasma membrane. Maspin has been shown to act at the cell surface to block cell motility and inhibit invasion of breast and prostate cancer cells. Maspin is present in normal mammary epithelial cells but is absent in many tumor cell lines, yet no major structural alterations of the Maspin gene have been identified in tumor cells. Similarly, Maspin is expressed in normal prostate cells and downregulated or absent in prostate tumor cells.

CHROMOSOMAL LOCATION

Genetic locus: SERPINB5 (human) mapping to 18q21.33; Serpinb5 (mouse) mapping to 1 E2.1.

SOURCE

Maspin (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Maspin 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-8543 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Maspin (C-20) is recommended for detection of Maspin 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).

Maspin (C-20) is also recommended for detection of Maspin in additional species, including equine, canine and porcine.

Suitable for use as control antibody for Maspin siRNA (h): sc-35860, Maspin siRNA (m): sc-35859, Maspin shRNA Plasmid (h): sc-35860-SH, Maspin shRNA Plasmid (m): sc-35859-SH, Maspin shRNA (h) Lentiviral Particles: sc-35860-V and Maspin shRNA (m) Lentiviral Particles: sc-35859-V.

Molecular Weight of Maspin: 42 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201 or HeLa whole cell lysate: sc-2200.

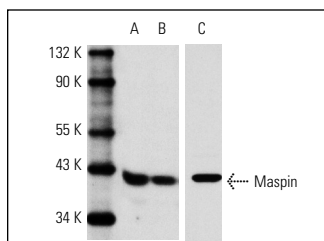
STORAGE

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

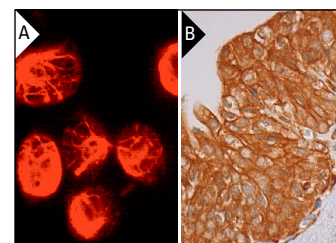
RESEARCH USE

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

DATA



Western blot analysis of Maspin expression in A-431 (A) and HeLa (B, C) whole cell lysates. Antibodies tested include: Maspin (C-20): sc-8543 (A, B) and Maspin (H-130): sc-22762 (C).



Maspin (C-20): sc-8543. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane staining (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human urinary bladder tissue showing cytoplasmic and membrane staining of urothelial cells (B).

SELECT PRODUCT CITATIONS

- Kurita, T., et al. 2004. Role of p63 and basal cells in the prostate. *Development* 131: 4955-4964.
- Nickoloff, B.J., et al. 2004. Tumor suppressor Maspin is up-regulated during keratinocyte senescence, exerting a paracrine antiangiogenic activity. *Cancer Res.* 64: 2956-2961.
- Ivanov, S.S., et al. 2004. Antibodies immobilized as arrays to profile protein post-translational modifications in mammalian cells. *Mol. Cell. Proteomics* 3: 788-795.
- Nakagawa, M., et al. 2006. Maspin expression and its clinical significance in non-small cell lung cancer. *Ann. Surg. Oncol.* 13: 1517-1523.
- Maekawa, T., et al. 2007. Reduced levels of ATF-2 predispose mice to mammary tumors. *Mol. Cell. Biol.* 27: 1730-1744.
- Klasa-Mazurkiewicz, D., et al. 2009. Maspin overexpression correlates with positive response to primary chemotherapy in ovarian cancer patients. *Gynecol. Oncol.* 113: 91-98.

PROTOCOLS

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



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Try **Maspin (C-8): sc-271694** or **Maspin (E-10): sc-166260**, our highly recommended monoclonal alternatives to Maspin (C-20).