Maspin is a structurally similar serine protease inhibitor (serpin) that is 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 down-regulated 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 (E-10) is a mouse monoclonal antibody raised against amino acids 51-180 mapping near the N-terminus of Maspin 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.

**STORAGE**

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

**APPLICATIONS**

Maspin (E-10) is recommended for detection of Maspin of mouse, rat and 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), 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).

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

Molecular Weight of Maspin: 42 kDa.

Positive Controls: Maspin (m): 293T Lysate: sc-121521, HeLa whole cell lysate: sc-2200 or A-431 whole cell lysate: sc-2201.

**RECOMMENDED SUPPORT REAGENTS**

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

1. Western Blotting: use m-IgG BP-HRP: sc-516102 or m-IgG BP-HRP (Cruz Marker) sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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