SERPINB5 / Maspin (Tumor Suppressor & Epithelial Biomarker) Antibody

Mouse Monoclonal Antibody [Clone SERPINB5/12558]

Catalog No	Format	Size
5268-MSM15-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug
5268-MSM15-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
5268-MSM15-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug

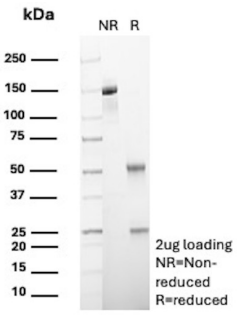
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

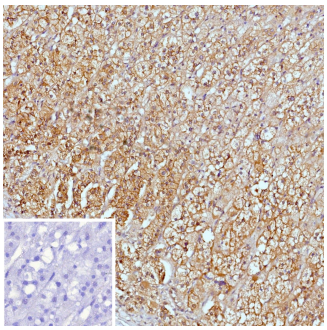
Clone	SERPINB5/12558
Gene Name	SERPINB5
Immunogen	Recombinant fragment (around aa1-200) of human SERPINB5 protein (exact sequence is proprietary)
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2b / Kappa
Mol. Weight of Antigen	42kDa
Cellular Localization	Cytoplasm, Extracellular space, Nucleus, Secreted
Species Reactivity	Human
Positive Control	Squamous epithelium or gastrointestinal tissue.

**Optimal dilution for a specific application should be determined.*

Product Images for SERPINB5 / Maspin (Tumor Suppressor & Epithelial Biomarker) Antibody



SDS-PAGE Analysis of Purified Serpin B5 Mouse Monoclonal Antibody (SERPINB5/12558). Confirmation of Purity and Integrity of Antibody.



Formalin-fixed, paraffin-embedded human adrenal gland stained with Maspin Mouse Monoclonal Antibody (SERPINB5/12558). Inset: PBS instead of primary antibody; secondary only negative control.

Specificity & Comments

Maspin, a member of the serpin (serine protease inhibitor) superfamily encoded by the SERPINB5 gene, was originally identified in normal human mammary epithelial cells. Serpins are a protein family that regulate chymotrypsin-like serine proteases, playing roles in controlling activated proteases and regulating cell death. Structurally, Maspin is located in the extracellular matrix and at the plasma membrane, where it exerts its function at the cell surface by inhibiting cell motility and invasion, particularly in breast and prostate cancer cells. Maspin is expressed in normal mammary and prostate epithelial cells but is often absent or downregulated in their corresponding tumor cells, despite no significant structural mutations in the Maspin gene being detected in these cancers. It acts as a tumor suppressor, particularly in epithelial cells, where it inhibits cancer cell invasion and metastasis. In primary breast cancer, Maspin expression is regulated by wild-type p53, linking it to a molecular mechanism that suppresses tumor invasion and metastasis. Loss of Maspin expression is associated with more aggressive tumors and worse prognosis in advanced breast and prostate cancers. Maspin expression varies significantly across cancers. While it is frequently downregulated in breast and prostate tumors, it is overexpressed in pancreatic, ovarian, thyroid, gastric, lung, bladder, skin, colon, and some breast cancers. In primary non-small cell lung cancer (NSCLC), general Maspin expression correlates with poorer overall survival, yet strong nuclear Maspin expression is linked to better overall and disease-free survival in patients with resectable NSCLC. In summary, Maspin is a multifunctional protein with dual roles in cancer, acting as a tumor suppressor in some contexts while being overexpressed in others. Its expression patterns and subcellular localization, particularly nuclear versus cytoplasmic, have significant implications for tumor behavior and patient prognosis.

Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C.Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

Angiogenesis, Apoptosis, Autophagy

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.