10320 Camino Santa Fe, Suite G
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Anti-MASPIN Antibody Picoband™ (monoclonal, 7G4E1)

Catalog # ABO16256

Specification

Anti-MASPIN Antibody Picoband™ (monoclonal, 7G4E1) - Product Information

Application	**WB, IHC, FC**
Primary Accession	P36952
Host	**Mouse**
Isotype	**Mouse IgG2a**
Reactivity	**Human**
Clonality	**Monoclonal**
Format	**Lyophilized**

Description
Anti-MASPIN Antibody Picoband™ (monoclonal, 7G4E1) . Tested in Flow Cytometry, IHC, WB applications. This antibody reacts with Human.

Reconstitution
Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.

Anti-MASPIN Antibody Picoband™ (monoclonal, 7G4E1) - Additional Information

Gene ID 5268

Other Names
Serpin B5, Maspin, Peptidase inhibitor 5, PI-5, SERPINB5, PI5

Calculated MW
42 kDa KDa

Application Details
Western blot, 0.25-0.5 µg/ml, Human
 Immunohistochemistry(Paraffin-embedded Section), 2-5 µg/ml, Human
 Flow Cytometry, 1-3 µg/1x10^6 cells, Human

Contents
Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na2HPO4.

Immunogen
E.coli-derived human MASPIN recombinant protein (Position: M1-A350). Human MASPIN shares 88% and 89% amino acid (aa) sequence identity with mouse and rat MASPIN, respectively.

Purification
Immunogen affinity purified.

Storage	**At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.**

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Anti-MASPIN Antibody Picoband™ (monoclonal, 7G4E1) - Protein Information

Name SERPINB5

Synonyms PI5

Function
Tumor suppressor. It blocks the growth, invasion, and metastatic properties of mammary tumors. As it does not undergo the S (stressed) to R (relaxed) conformational transition characteristic of active serpins, it exhibits no serine protease inhibitory activity.

Cellular Location
Secreted, extracellular space.

Tissue Location
Normal mammary epithelial cells.

Anti-MASPIN Antibody Picoband™ (monoclonal, 7G4E1) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-MASPIN Antibody Picoband™ (monoclonal, 7G4E1) - Images

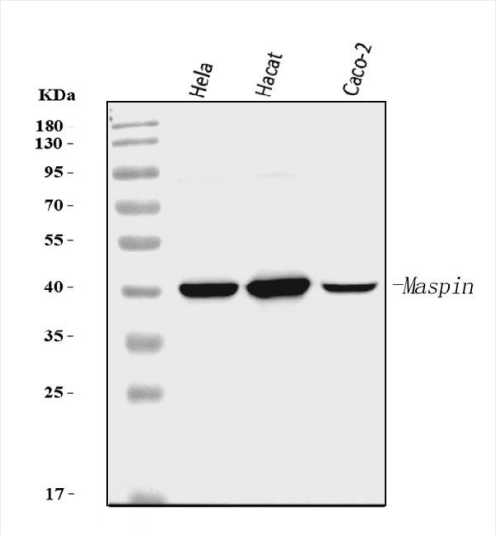

Figure 1. Western blot analysis of MASPIN using anti-MASPIN antibody (M03409). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,
Lane 2: human Hacat whole cell lysates,
Lane 3: human Caco-2 whole cell lysates.
After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-MASPIN antigen affinity purified monoclonal antibody (Catalog # M03409) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for MASPIN at approximately 42 kDa. The expected band size for MASPIN is at 42 kDa.

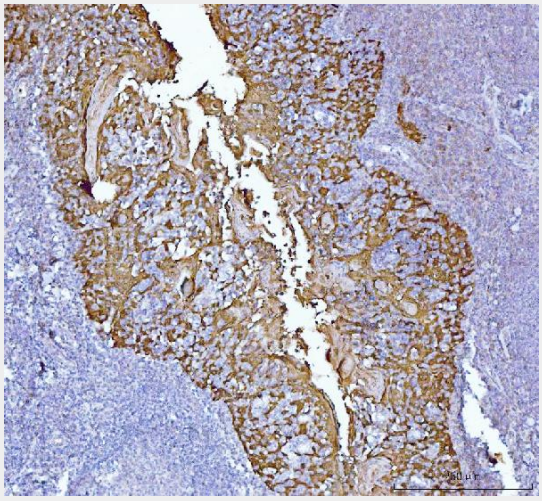

Figure 2. IHC analysis of MASPIN using anti-MASPIN antibody (M03409).
MASPIN was detected in a paraffin-embedded section of human tonsil tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-MASPIN Antibody (M03409) overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.

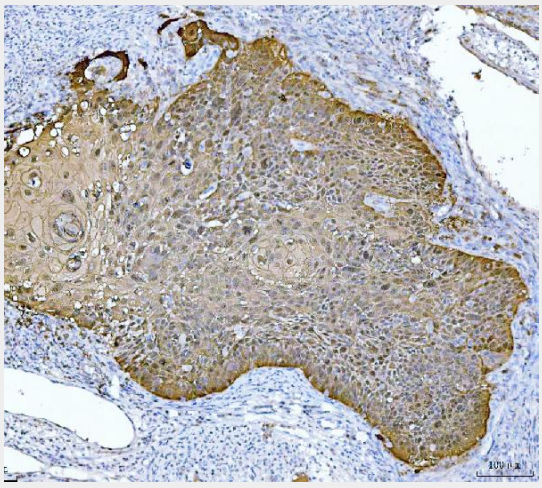

Figure 3. IHC analysis of MASPIN using anti-MASPIN antibody (M03409).
MASPIN was detected in a paraffin-embedded section of human laryngeal squamous cell carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was

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then incubated with 2 µg/ml mouse anti-MASPIN Antibody (M03409) overnight at 4°C. Peroxidase Conjugated Goat Anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Mouse IgG Super Vision Assay Kit (Catalog # SV0001) with DAB as the chromogen.

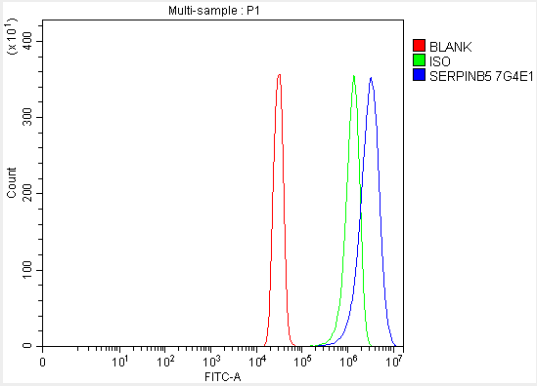

Figure 4. Flow Cytometry analysis of SiHa cells using anti-MASPIN antibody (M03409).
Overlay histogram showing SiHa cells stained with M03409 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-MASPIN Antibody (M03409, 1 µg/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10 µg/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG (1 µg/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

Anti-MASPIN Antibody Picoband™ (monoclonal, 7G4E1) - Background

SERPINB5 is also known as PI5 or maspin. Maspin (mammary serine protease inhibitor) is a protein that in humans is encoded by the SERPINB5 gene. Maspin is expressed in the skin, prostate, testis, intestine, tongue, lung, and the thymus. Maspin is a member of the serpin superfamily of serine protease inhibitors.[1] The primary function of most members of this family is to regulate the breakdown of proteins by inhibiting the catalytic activity of proteinases. Through this mechanism of action, serpins regulate a number of cellular processes includingphagocytosis, coagulation, and fibrinolysis.