

# Moesin Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone SPM562] Catalog # AH10595

## **Product Information**

ApplicationIF, FC, IHC-PPrimary AccessionP26038Other Accession4478, 87752ReactivityHuman, RatHostMouseClonalityMonoclonal

Isotype Mouse / IgG1, kappa

Clone Names SPM562 Calculated MW 67820

## **Additional Information**

Gene ID 4478

Other Names Moesin, Membrane-organizing extension spike protein, MSN

**Application Note** IF~~1:50~200 FC~~1:10~50 IHC-P~~N/A

**Format** 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** Store at 2 to 8°C.Antibody is stable for 24 months.

**Precautions** Moesin Antibody - With BSA and Azide is for research use only and not for

use in diagnostic or therapeutic procedures.

## **Protein Information**

Name MSN (<u>HGNC:7373</u>)

**Function** Ezrin-radixin-moesin (ERM) family protein that connects the actin

cytoskeleton to the plasma membrane and thereby regulates the structure and function of specific domains of the cell cortex. Tethers actin filaments by oscillating between a resting and an activated state providing transient interactions between moesin and the actin cytoskeleton (PubMed:10212266). Once phosphorylated on its C-terminal threonine, moesin is activated leading

to interaction with F-actin and cytoskeletal rearrangement

(PubMed: <u>10212266</u>). These rearrangements regulate many cellular processes,

including cell shape determination, membrane transport, and signal

transduction (PubMed: 12387735, PubMed: 15039356). The role of moesin is

particularly important in immunity acting on both T and B-cells homeostasis and self-tolerance, regulating lymphocyte egress from lymphoid organs (PubMed:9298994, PubMed:9616160). Modulates phagolysosomal biogenesis in macrophages (By similarity). Also participates in immunologic synapse formation (PubMed:27405666).

#### **Cellular Location**

Cell membrane; Peripheral membrane protein {ECO:0000250|UniProtKB:P26041}; Cytoplasmic side {ECO:0000250|UniProtKB:P26041}. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:P26041}. Apical cell membrane {ECO:0000250|UniProtKB:P26041}; Peripheral membrane protein

{ECO:0000250|UniProtKB:P26041}; Cytoplasmic side

{ECO:0000250|UniProtKB:P26041}. Cell projection, microvillus membrane

{ECO:0000250|UniProtKB:P26041}; Peripheral membrane protein

{ECO:0000250|UniProtKB:P26041}; Cytoplasmic side

{ECO:0000250|UniProtKB:P26041}. Cell projection, microvillus

{ECO:0000250|UniProtKB:P26041}. Note=Phosphorylated form is enriched in microvilli-like structures at apical membrane. Increased cell membrane localization of both phosphorylated and non-phosphorylated forms seen after

thrombin treatment (By similarity). Localizes at the uropods of T

lymphoblasts. {ECO:0000250 | UniProtKB:P26041,

ECO:0000269 | PubMed:18586956, ECO:0000269 | PubMed:9298994}

#### **Tissue Location**

In all tissues and cultured cells studied.

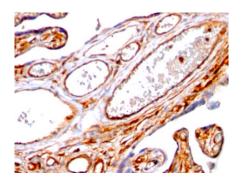
# **Background**

Recognizes 78kDa moesin protein. Moesin, a member of the talin-4.1 superfamily, is a linking protein of the submembraneous actin cytoskeleton. It is expressed in variable amounts in cells of different phenotypes such as macrophages, lymphocytes, fibroblastic, endothelial, epithelial, and neuronal cell lines but not in blood cells. The ERM proteins, ezrin, radixin, and moesin are involved in a variety of cellular functions, such as cell adhesion, migration, and the organization of cell surface structures, and are highly homologous, both in protein sequence and in functional activity, with merlin/schwannomin, a neurofibromatosis-2-associated tumor-suppressor protein. Cell lines of epithelial and mesothelial origin contain both moesin and radixin whereas cells of endothelial and lymphoid origin express moesin.

### References

Lankes W et. al., Biochem Journal, 1988; 251:831-842. | Schwartz-Albiez R et. al., European Journal Cell Biology, 1995; 67:189-198. |

## **Images**



Formalin-fixed, paraffin-embedded human Placenta stained with Moesin Monoclonal Antibody (SPM562)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.