

# Anti-Moesin Antibody

Mouse Monoclonal Antibody Catalog # AH13405

#### **Product Information**

**Application** WB, IHC-P, IF, FC

Primary Accession P26038
Other Accession 87752
Reactivity Human, Rat
Host Mouse
Clonality Monoclonal

Isotype Mouse / IgG1, kappa

Clone Names MSN/491 Calculated MW 67820

### **Additional Information**

**Gene ID** 4478

Other Names Membrane-organizing extension spike protein; Moesin/anaplastic lymphoma

kinase fusion protein; MSN/ALK fusion

**Application Note** Flow Cytometry (0.5-1ug/million cells); Immunofluorescence (0.5-1ug/ml);

,Western Blotting (0.5-1ug/ml); ,Immunohistology (Formalin-fixed) (0.5-1ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be

determined.

**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**Anti-Moesin Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

#### **Protein Information**

Name MSN ( HGNC:7373)

**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:10212266). 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}

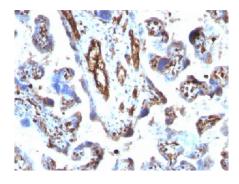
**Tissue Location** 

In all tissues and cultured cells studied.

## Background

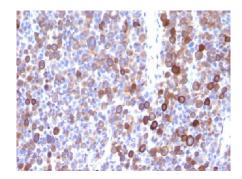
Recognizes 78kDa moesin protein. Moesin, a member of the talin-4.1 superfamily, is a linking protein of the sub-membranous actin cytoskeleton. It is expressed in variable amounts in cells of different phenotypes such as macrophages, lymphocytes, fibroblastic, endothelial, epithelial, and neuronal cell 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.

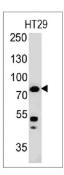
## **Images**



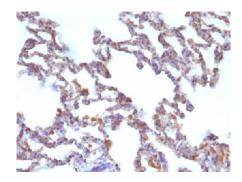
Formalin-paraffin human Placenta stained with Moesin MAb (MSN/491)

Formalin-paraffin human Melanoma stained with Moesin MAb (MSN/491)

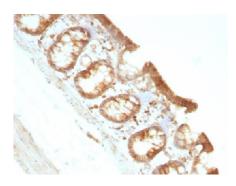




Western blot of HT29 Cell Lysate using Moesin MAb (MSN/491).



Formalin-paraffin Rat Lung stained with Moesin MAb (MSN/491)



Formalin-paraffin Rat Colon stained with Moesin MAb (MSN/491)

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