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Moesin Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone MSN/492]
Catalog # AH11848

Product Information

Application	WB, IHC, IF, FC
Primary Accession	P26038
Other Accession	4478, 87752
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	MSN/492
Calculated MW	67820

Additional Information

Gene ID	4478
Other Names	Moesin, Membrane-organizing extension spike protein, MSN
Application Note	WB~~1:1000 IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50
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 (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.

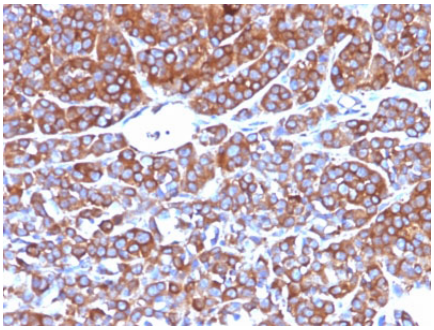
Background

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.

References

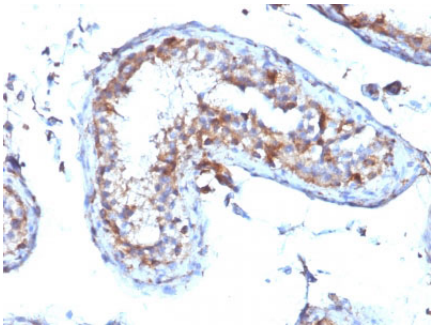
Schwartz-Albiez R et. al., European Journal Cell Biology, 1995; 67:189-198. | Lankes W et. al., Biochem Journal, 1988; 251:831-842. |

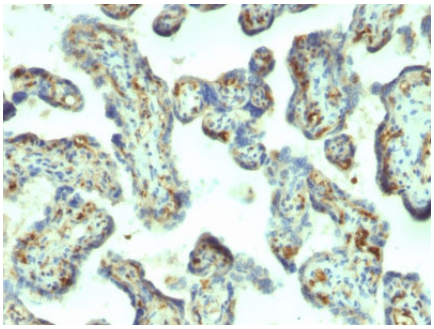
Images



Formalin-fixed, paraffin-embedded human Melanoma stained with Moesin Monoclonal Antibody (MSN/492)

Formalin-fixed, paraffin-embedded human Testicular Carcinoma stained with Moesin Monoclonal Antibody (MSN/492)





Formalin-fixed, paraffin-embedded human Placenta stained with Moesin Monoclonal Antibody (MSN/492)