

Moesin Ab-1 (Clone 38/87)

Mouse Monoclonal Antibody

- Cat. #MS-727-P0, -P1, or -P (0.1ml, 0.5ml, or 1.0ml at 200 μ g/ml) (Purified Ab with BSA and Azide)
- Cat. #MS-727-P1ABX or -PABX (0.1ml or 0.2ml at 1.0mg/ml) (Purified Ab without BSA and Azide)
- Cat. #MS-727-B0, -B1, or -B (0.1ml, 0.5ml, or 1.0ml at 200 μ g/ml) (Biotin-labeled Ab with BSA and Azide)
- Cat. #MS-727-R7 (7.0ml) (Ready-to-Use for Immunohistochemical Staining)
- Cat. #MS-727-PCS (5 Slides) (Positive Control for Histology)
- Cat. #MS-727-PCL (0.1ml) (Positive Control for Western Blot)

Description: Moesin, a member of the talin-4.1 superfamily, is a linking protein of the submembraneous actin cytoskeleton. It is expressed in macrophages, lymphocytes, fibroblastic, endothelial, epithelial, and neuronal cell lines but not in blood cells. It is involved in cell adhesion, migration, and organization of cell surface structures.

Comments: Ab-1 does not react with talin or ezrin.² It weakly reacts with radixin. Ab-1 detects most of the proteolytic fragments of moesin.¹

Epitope: Not determined

Mol. Wt. of Antigen: 78kDa moesin and 80kDa radixin.

Species Reactivity: Human, Cow, and Rat. Others-not known.

Clone Designation: 38/87

Ig Isotype / Light Chain: IgG₁ / κ

Immunogen: Moesin purified from cow uterus.

Applications and Suggested Dilutions:

- Immunofluorescence^{1,2}
- Immunoprecipitation^{1,2} (Denatured only)
- (Ab at 2 μ g/mg protein lysate) (Use Protein G)
- Inhibits (40%) Binding of Proteoglycan to Smooth Muscle Cells¹ (Order Ab without Azide) (Use Ab at 5 μ g/ml for 45 min¹)
- Inhibits Proliferation of Smooth Muscle Cells¹ (Use Ab without Azide; 5 μ g/ml for 3 days¹)
- Western Blotting^{1,2} (1-2 μ g/ml for 2hrs at RT)
- Immunohistology (Formalin/paraffin) (Use Ab at 0.25-0.5 μ g/ml for 30 min at RT)
- * [Staining of formalin-fixed tissues REQUIRES boiling tissue sections in 10mM citrate buffer, pH 6.0, (**NEOMARKERS'** Cat. #AP-9003), for 10-20 min followed by cooling at RT for 20 min.]

The optimal dilution for a specific application should be determined by the investigator.

Positive Control: Raji cells. Placenta.

Cellular Localization: Cell membrane and cytoplasmic

Supplied As:

200 μ g/ml of antibody purified from ascites fluid by Protein G chromatography. Prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide. Also available without BSA and azide at 1mg/ml,

or

Prediluted antibody which is ready-to-use for staining of formalin-fixed, paraffin-embedded tissues.

Storage and Stability:

Ab with sodium azide is stable for 24 months when stored at 2-8°C. Antibody WITHOUT sodium azide is stable for 36 months when stored at below 0°C.

Key References:

1. Lankes W *et. al.*, Biochem Journal, 1988; 251:831-842.
2. Schwartz-Albiez R *et. al.*, Eur J Cell Biol, 1995; 67:189-198.

Limitations and Warranty:

Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. NeoMarkers is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

Material Safety Data:

This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin



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and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

For Research Use Only

Suggested References:

1. Schwartz-Albiez R, Merling A, Spring H, Moller P, Koretz K: Differential expression of the microspike-associated protein moesin in human tissues. *Eur J Cell Biol* 1995;67(3):189-198.
2. Amieva MR, Furthmayr H: Subcellular localization of moesin in dynamic filopodia, retraction fibers, and other structures involved in substrate exploration, attachment, and cell-cell contacts. *Exp Cell Res* 1995;219(1):180-196.
3. Majander-Nordenswan P, Sainio M, Turunen O, Jaaskelainen J, Carpen O, Kere J, Vaheri A: Genomic structure of the human ezrin gene. *Hum Genet* 1998;103(6):662-665.
4. Tsukita S, Yonemura S: ERM (ezrin/radixin/moesin) family: from cytoskeleton to signal transduction. *Curr Opin Cell Biol* 1997 Feb;9(1):70-75.
5. Simons PC, Pietromonaco SF, Reczek D, Bretscher A, Elias L: C-terminal threonine phosphorylation activates ERM proteins to link the cell's cortical lipid bilayer to the cytoskeleton. *Biochem Biophys Res Commun* 1998 Dec 30;253(3):561-565.
6. Chishti AH, Kim AC, Marfatia SM, Lutchman M, Hanspal M, Jindal H, Liu SC, Low PS, Rouleau GA, Mohandas N, Chasis JA, Conboy JG, Gascard P,

Takakuwa Y, Huang SC, Benz EJ Jr, Bretscher A, Fehon RG, Gusella JF, Ramesh V, Solomon F, Marchesi VT, Tsukita S, Tsukita S, Hoover KB, et al: The FERM domain: a unique module involved in the linkage of cytoplasmic proteins to the membrane. *Trends Biochem Sci* 1998 Aug;23(8):281-282.

7. Doi Y, Itoh M, Yonemura S, Ishihara S, Takano H, Noda T, Tsukita S: Normal development of mice and unimpaired cell Adhesion/Cell Motility/Actin-based cytoskeleton without compensatory Up-regulation of ezrin or radixin in moesin gene knockout. *J Biol Chem* 1999;274(4):2315-2321.

8. Masumoto J, Sagara J, Hayama M, Hidaka E, Katsuyama T, Taniguchi S: Differential expression of moesin in cells of hematopoietic lineage and lymphatic systems. *Histochem Cell Biol* 1998 Jul;110(1):33-41.

9. Carmeci C, Thompson DA, Kuang WW, Lightdale N, Furthmayr H, Weigel RJ: Moesin expression is associated with the estrogen receptor-negative breast cancer phenotype. *Surgery* 1998 Aug;124(2):211-217.

10. Ichikawa T, Masumoto J, Kaneko M, Saida T, Sagara J, Taniguchi S: Expression of moesin and its associated molecule CD44 in epithelial skin tumors. *J Cutan Pathol* 1998;25(5):237-243.

11. Ichikawa T, Masumoto J, Kaneko M, Saida T, Sagara J, Taniguchi S: Moesin and CD44 expression in cutaneous melanocytic tumours. *Br J Dermatol* 1998 May;138(5):763-768.

