

Ezrin (SPM244): sc-56388

BACKGROUND

Ezrin, Moesin and Radixin belong to a family of highly homologous actin-associated proteins that are localized just beneath the plasma membrane. The proteins are believed to be involved in the mediation of interactions between cytoskeletal and membrane proteins. Ezrin serves as a major cytoplasmic substrate of various protein-tyrosine kinases, including the epidermal growth factor receptor. Ezrin has also been identified as a cAMP-dependent protein kinase (A-kinase) anchoring protein and designated AKAP78. Moesin and Radixin share over 70% homology with Ezrin and are coexpressed within various cell types. Despite the high degree of homology, the three proteins exhibit a distinct receptor-specific pattern of phosphorylation.

REFERENCES

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- Lankes, W.T. and Furthmayr, H. 1991. Moesin: a member of the protein 4.1-Talin-Ezrin family of protein. *Proc. Natl. Acad. Sci. USA* 88: 8297-8301.
- Sato, N., et al. 1992. A gene family consisting of Ezrin, Radixin and Moesin. Its specific localization at actin filament/plasma membrane association sites. *J. Cell Sci.* 103: 131-143.
- Fazioli, F., et al. 1993. The Ezrin-like family of tyrosine kinase substrates: receptor-specific pattern of tyrosine phosphorylation and relationship to malignant transformation. *Oncogene* 8: 1335-1345.
- Algrain, M., et al. 1993. Ezrin contains cytoskeleton and membrane binding domains accounting for its proposed role as a membrane-cytoskeletal linker. *J. Cell Biol.* 120: 129-139.
- Tsukita, S., et al. 1994. ERM family members as molecular linkers between the cell surface glycoprotein CD44 and actin-based cytoskeletons. *J. Cell Biol.* 126: 391-401.
- Andreoli, C., et al. 1994. Ezrin has properties to self-associate at the plasma membrane. *J. Cell Sci.* 107: 2509-2521.

CHROMOSOMAL LOCATION

Genetic locus: VIL2 (human) mapping to 6q25.3; Ezr (mouse) mapping to 17 A1.

SOURCE

Ezrin (SPM244) is a mouse monoclonal antibody raised against amino acids 362-585 of Ezrin of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Ezrin (SPM244) is recommended for detection of Ezrin of mouse, rat, human and feline origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Ezrin siRNA (h): sc-35349, Ezrin siRNA (m): sc-35350, Ezrin shRNA Plasmid (h): sc-35349-SH, Ezrin shRNA Plasmid (m): sc-35350-SH, Ezrin shRNA (h) Lentiviral Particles: sc-35349-V and Ezrin shRNA (m) Lentiviral Particles: sc-35350-V.

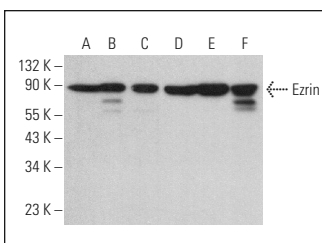
Molecular Weight of Ezrin: 87 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, 3T3-L1 cell lysate: sc-2243 or EOC 20 whole cell lysate: sc-364187.

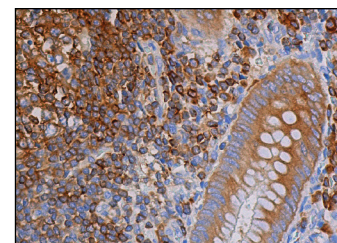
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA




Ezrin (SPM244): sc-56388. Western blot analysis of Ezrin expression in NIH/3T3 (A), 3T3-L1 (B), EOC 20 (C), HEK293 (D), Raji (E) and HT-29 (F) whole cell lysates.



Ezrin (SPM244): sc-56388. Immunoperoxidase staining of formalin fixed, paraffin-embedded human appendix tissue showing cytoplasmic and membrane staining of glandular cells and lymphoid cells.

RESEARCH USE

For research use only, not for use in diagnostic procedures.



See **p27 (F-8): sc-1641** for p27 antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.