

Ezrin (6A84): sc-71082

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

- Gould, K.L., et al. 1989. CDNA cloning and sequencing of the protein-tyrosine kinase substrate, Ezrin, reveals homology to band 4.1. *EMBO J.* 8: 4133-4142.
- 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.

CHROMOSOMAL LOCATION

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

SOURCE

Ezrin (6A84) 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.

APPLICATIONS

Ezrin (6A84) is recommended for detection of Ezrin of mouse, rat, human and bovine 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: COLO 205 whole cell lysate: sc-364177, Raji whole cell lysate: sc-364236 or F9 cell lysate: sc-2245.

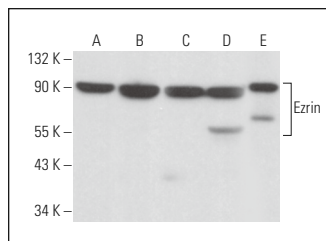
STORAGE

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

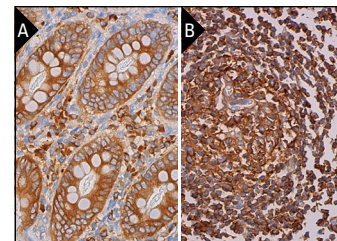
RESEARCH USE

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

DATA



Ezrin (6A84): sc-71082. Western blot analysis of Ezrin expression in F9 (A), Raji (B), COLO 205 (C) and HEK293 (D) whole cell lysates and mouse postnatal kidney tissue extract (E).



Ezrin (5G110): sc-71082. Immunoperoxidase staining of formalin fixed, paraffin-embedded human appendix tissue showing cytoplasmic and membrane staining of glandular cells and lymphoid cells (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human lymph node tissue showing cytoplasmic and membrane staining of cells in germinal center and cells in non-germinal center (B).

SELECT PRODUCT CITATIONS

- Leiphrakpam, P.D., et al. 2014. Ezrin expression and cell survival regulation in colorectal cancer. *Cell. Signal.* 26: 868-879.
- Leiphrakpam, P.D., et al. 2018. TGFβ and IGF1R signaling activates protein kinase A through differential regulation of Ezrin phosphorylation in colon cancer cells. *J. Biol. Chem.* 293: 8242-8254.
- Belvedere, R., et al. 2018. Effects of Prisma® Skin dermal regeneration device containing glycosaminoglycans on human keratinocytes and fibroblasts. *Cell Adh. Migr.* 12: 168-183.
- Bizzarro, V., et al. 2019. Mesoglycan induces keratinocyte activation by triggering syndecan-4 pathway and the formation of the annexin A1/ S100A11 complex. *J. Cell. Physiol.* 234: 20174-20192.
- Pagliara, V., et al. 2020. Bioactive ent-kaurane diterpenes oridonin and irudonin prevent cancer cells migration by interacting with the Actin cytoskeleton controller Ezrin. *Int. J. Mol. Sci.* 21: 7186.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.



See **Ezrin (3C12): sc-58758** for Ezrin antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.