

Ezrin (C-19): sc-6407

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., et al. 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.

SOURCE

Ezrin (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Ezrin of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-6407 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Ezrin (C-19) is recommended for detection of Ezrin, Ermin, Radixin and Moesin of mouse, rat and human 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Ezrin (C-19) is also recommended for detection of Ezrin, Ermin, Radixin and Moesin in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of Ezrin: 87 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, HeLa whole cell lysate: sc-2200 or Ezrin (h2): 293T Lysate: sc-170691.

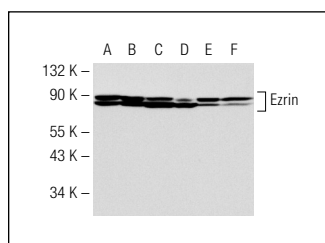
STORAGE

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

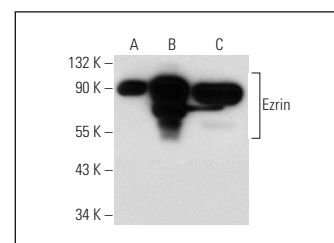
RESEARCH USE

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

DATA



Ezrin (C-19): sc-6407. Western blot analysis of ERM family members in A-431 (A), HeLa (B), Jurkat (C), NIH/3T3 (D) and F9 (E) whole cell lysates and rat liver extract (F).



Ezrin (C-19): sc-6407. Western blot analysis of Ezrin expression in non-transfected 293T: sc-117752 (A), human Ezrin transfected 293T: sc-170691 (B) and Ramos (C) whole cell lysates.

SELECT PRODUCT CITATIONS

- Martín, J.C., et al. 2000. Increased adhesiveness in cultured endometrial-derived cells is related to the absence of moesin expression. *Biol. Reprod.* 63: 1370-1376.
- Wade, J.B., et al. 2001. Differential renal distribution of NHERF isoforms and their colocalization with NHE-3, Ezrin, and ROM-K. *Am. J. Physiol., Cell Physiol.* 280: C192-C198.
- Grune, T., et al. 2002. Ezrin turnover and cell shape changes catalyzed by proteasome in oxidatively stressed cells. *FASEB J.* 16: 1602-1610.
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- Dedieu, S., et al. 2004. Myoblast migration is regulated by Calpain through its involvement in cell attachment and cytoskeletal organization. *Exp. Cell Res.* 292: 187-200.
- Kuns, R., et al. 2005. Protein 4.1B expression is induced in mammary epithelial cells during pregnancy and regulates their proliferation. *Oncogene* 24: 6502-6515.
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