# SANTA CRUZ BIOTECHNOLOGY, INC.

# Ezrin (H-300): sc-32918



# BACKGROUND

Ezrin, Moesin and Radixin belong to a family of highly homologous actinassociated 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.

#### SOURCE

Ezrin (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of Ezrin of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

### **STORAGE**

Store at 4° C, \*\*D0 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.

### **APPLICATIONS**

Ezrin (H-300) is recommended for detection of Ezrin, Radixin, Moesin, and to a lesser extent, NF2 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), immunohistochemistry (including paraffin-embedded sections) (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 (H-300) is also recommended for detection of Ezrin, Radixin, Moesin, and to a lesser extent, NF2 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.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941. 4) Immuno-histochemistry: use ImmunoCruz<sup>™</sup>: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

# DATA





Ezrin (H-300): sc-32918. Western blot analysis of Ezrin expression in non-transfected: sc-117752 (**A**) and human Ezrin transfected: sc-170691 (**B**) 293T whole cell lysates.

#### Ezrin (H-300): sc-32918. Immunoperoxidase staining of formalin fixed, paraffin-embedded human urinary bladder tissue showing cytoplasmic and membrane staining of urothelial cells.

#### SELECT PRODUCT CITATIONS

- Wakayama, T., et al. 2009. Expression, localization, and binding activity of the Ezrin/Radixin/Moesin proteins in the mouse testis. J. Histochem. Cytochem. 57: 351-362.
- Lindner, C., et al. 2013. A link between two tumorigenic proteins, CD44 and p21<sup>WAF1</sup>: CD44 increases phorbol ester-induced expression of p21<sup>WAF1</sup> by stabilizing its mRNA and extending protein half-life. FEBS Lett. 587: 2698-2704.

### PROTOCOLS

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