SANTA CRUZ BIOTECHNOLOGY, INC.

Moesin (C-15): sc-6410

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Ezrin, Moesin and Radixin belong to a family of highly homologous actin-associated proteins that are localized just beneath the plasma membrane. These 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 more than 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.

CHROMOSOMAL LOCATION

Genetic locus: MSN (human) mapping to Xq12, EZR (human) mapping to 6q25.3; Msn (mouse) mapping to X C3, Ezr (mouse) mapping to 17 A1.

SOURCE

Moesin (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Moesin 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-6410 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Moesin (C-15) is recommended for detection of Moesin and, to a lesser extent, Ezrin 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).

Moesin (C-15) is also recommended for detection of Moesin and, to a lesser extent, Ezrin in additional species, including equine, canine, bovine and porcine.

Molecular Weight of Moesin: 77 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A-431 whole cell lysate: sc-2201 or Jurkat whole cell lysate: sc-2204.

STORAGE

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

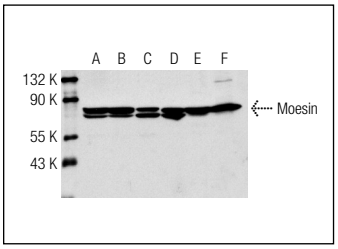
PROTOCOLS

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

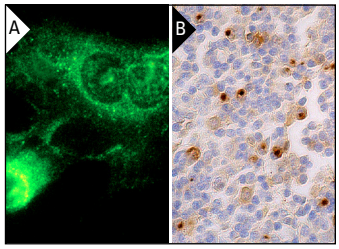
RESEARCH USE

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

DATA



Moesin (C-15): sc-6410. 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**).



Moesin (C-15): sc-6410. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing cytoskeletal localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human lymph node tissue showing nucleolar and cytoplasmic staining of subset of cells in germinal and non-germinal centers (**B**).

SELECT PRODUCT CITATIONS

1. Tokunou, M., et al. 2000. Altered expression of the ERM proteins in lung adenocarcinoma. Lab. Invest. 80: 1643-1650.
2. O'Brien, M., et al. 2008. Expression of Rho GTPase regulators in human myometrium. Reprod. Biol. Endocrinol. 6: 1.
3. 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.
4. Killock, D.J. and Ivetic, A. 2010. The cytoplasmic domains of TNFα-converting enzyme (TACE/ADAM17) and L-selectin are regulated differently by p38 MAPK and PKC to promote ectodomain shedding. Biochem. J. 428: 293-304.
5. Bartholow, T.L., et al. 2011. Immunohistochemical staining of radixin and moesin in prostatic adenocarcinoma. BMC Clin. Pathol. 11: 1.
6. Sperka, T., et al. 2011. Activation of Ras requires the ERM-dependent link of actin to the plasma membrane. PLoS ONE 6: e27511.
7. Chen, W., et al. 2013. Desensitization of G protein-coupled receptors induces vascular hypocontractility in response to norepinephrine in the mesenteric arteries of cirrhotic patients and rats. Hepatobiliary Pancreat. Dis. Int. 12: 295-304.
8. Parra, L.M., et al. 2015. Distinct intracellular domain substrate modifications selectively regulate ectodomain cleavage of NRG1 or CD44. Mol. Cell. Biol. 35: 3381-3895.

MONOS Satisfaction Guaranteed

Try **Moesin (E-10): sc-13122** or **Moesin (38/87): sc-58806**, our highly recommended monoclonal alternatives to Moesin (C-15). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Moesin (E-10): sc-13122**.