Revision 1

Store at -20C

#3142

Ezrin/Radixin/Moesin Antibody

Cell Signaling TECHNOLOGY®

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R Mk B	Endogenous	75 Moesin. 80 Ezrin and Radixin.	Rabbit	#P15311, #P35241, #P26038	7430, 5962, 4478

Product Usage Information

Application	Dilution
Western Blotting	1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Ezrin/Radixin/Moesin Antibody detects endogenous levels of ezrin, radixin and moesin. The antibody does not cross-react with related proteins such as merlin or band 4.1.

Species predicted to react based on 100% sequence homology

Xenopus, Dog

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the residues surrounding Thr567 of human ezrin. Antibodies are purified by protein A and peptide affinity chromatography.

Background

The ezrin, radixin, and moesin (ERM) proteins function as linkers between the plasma membrane and the actin cytoskeleton and are involved in cell adhesion, membrane ruffling, and microvilli formation (1). ERM proteins undergo intra or intermolecular interaction between their amino- and carboxy-terminal domains, existing as inactive cytosolic monomers or dimers (2). Phosphorylation at a carboxy-terminal threonine residue (Thr567 of ezrin, Thr564 of radixin, Thr558 of moesin) disrupts the amino- and carboxy-terminal association and may play a key role in regulating ERM protein conformation and function (3,4). Phosphorylation at Thr567 of ezrin is required for cytoskeletal rearrangements and oncogene-induced transformation (5). Ezrin is also phosphorylated at tyrosine residues upon growth factor stimulation. Phosphorylation of Tyr353 of ezrin transmits a survival signal during epithelial differentiation (6).

Background References

1. Tsukita, S. and Yonemura, S. (1999) *J Biol Chem* 274, 34507-10.
2. Mangeat, P. et al. (1999) *Trends Cell Biol* 9, 187-92.
3. Matsui, T. et al. (1998) *J Cell Biol* 140, 647-57.
4. Gautreau, A. et al. (2000) *J Cell Biol* 150, 193-203.
5. Tran Quang, C. et al. (2000) *EMBO J* 19, 4565-76.
6. Gautreau, A. et al. (1999) *Proc Natl Acad Sci U S A* 96, 7300-5.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey **B:** Bovine

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Limited Uses

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