

Phospho-Ezrin (Thr567)/Radixin (Thr564)/Moesin (Thr558) Blocking Peptide

✓ 100 µg

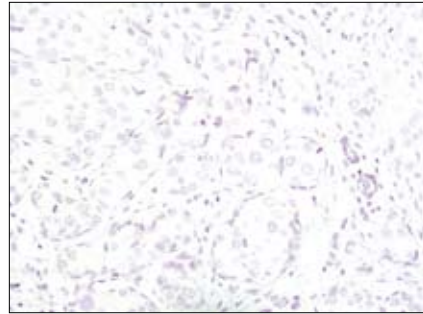
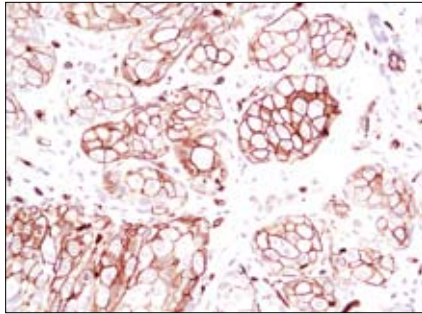
Orders ■ 877-616-CELL (2355)
orders@cellsignal.com

Support ■ 877-678-TECH (8324)
info@cellsignal.com

Web ■ www.cellsignal.com

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This product is for *in vitro* research use only and is not intended for use in humans or animals.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma using Phospho-Ezrin (Thr567)/Radixin (Thr564)/Moesin (Thr558) (41A3) Rabbit mAb #3149 in the presence of control peptide (left) or Phospho-Ezrin (Thr567)/Radixin (Thr564)/Moesin (Thr558) (41A3) Blocking Peptide (right).

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 their 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).

Description: This peptide is used to block Phospho-Ezrin (Thr567)/Radixin (Thr564)/Moesin (Thr558) (41A3) Rabbit mAb # 3149 reactivity.

Quality Control: The quality of the peptide was evaluated by reversed-phase HPLC and by mass spectrometry. The peptide blocks Phospho-Ezrin (Thr567)/Radixin (Thr564)/Moesin (Thr558) (41A3) Rabbit mAb #3149 by immunohistochemistry.

Directions for Use: For immunohistochemistry, add twice the volume of peptide as volume of antibody used in 100 µl total volume. Incubate for a minimum of 30 minutes prior to adding the entire volume to the slide. Recommended antibody dilutions can be found on the product data sheet.

Applications: Use as a blocking reagent to evaluate the specificity of antibody reactivity in immunohistochemistry protocols.

Background References:

- (1) Tsukita, S. and Yonemura, S. (1999) *J. Biol. Chem.* 274, 34507–34510.
- (2) Mangeat, P. et al. (1999) *Trends Cell Biol.* 9, 187–192.
- (3) Matsui, T. et al. (1998) *J. Cell Biol.* 140, 647–657.
- (4) Gautreau, A. et al. (2000) *J. Cell Biol.* 150, 193–203.
- (5) Tran Quang, C. et al. (2000) *EMBO J.* 19, 4565–4576.
- (6) Gautreau, A. et al. (1999) *Proc. Natl. Acad. Sci. USA* 96, 7300–7305.

Storage: Supplied in 20 mM potassium phosphate (pH 7.0), 50 mM NaCl, 0.1 mM EDTA, 1 mg/ml BSA and 5% glycerol. Store at -20°C.

Companion Products:

Phospho-Ezrin (Thr567)/Radixin (Thr564)/Moesin (Thr558) (41A3) Rabbit mAb #3149