Ezrin Antibody

For Research Use Only. Not For Use In Diagnostic Procedures.

Applications | Species Cross-Reactivity* | Molecular Wt. | Source |
--- | --- | --- | --- |
Western blotting, IP, IHC-P, IF-IC, F | H, M, R, Mk, B | 81 kDa | Rabbit** |
Endogenous

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.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:
- Western blotting: 1:1000
- Immunoprecipitation: 1:50
- Immunohistochemistry (Paraffin): 1:100
- IHC protocol: Unmasking buffer/Antibody diluent
- Citrate/TBST-5%NGS
- Immunofluorescence (IF-IC): 1:200
- Flow Cytometry: 1:50

For application specific protocols please see the web page for this product at www.cellsignal.com.

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).

Specificity/Sensitivity: Ezrin Antibody detects endogenous levels of total ezrin protein. This antibody does not cross-react with ezrin homologues such as radixin and moesin.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to human ezrin. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

Recommended Companion Products:
- Phospho-Ezrin (Thr567)/Radixin (Thr564)/Moesin (Thr558) Antibody #3141
- Ezrin/Radixin/Moesin Antibody #3142
- Phospho-Ezrin (Tyr353) Antibody #3144
- Moesin Antibody #3146
- Moesin (Q480) Antibody #3150
- Phospho-Ezrin (Thr567)/Radixin (Thr564)/Moesin (Thr558) (41A3) Rabbit mAb #3149
- Phototope™-HRP Western Blot Detection System, Anti-rabbit IgG, HRP-linked Antibody #7071
- Anti-rabbit IgG, HRP-linked Antibody #7074
- Prestained Protein Marker, Broad Range (Premixed Format) #7720
- Biotinylated Protein Ladder #7727
- 20X LumiGLO® Reagent and 20X Peroxide #7003

Please visit www.cellsignal.com for a complete listing of recommended companion products.

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

Applications Key: W—Western IP—Immunoprecipitation IHC—IImmunohistochemistry CitP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide

Species Cross-Reactivity Key: H—human M—mouse R—rat Mm—hamster Mk—mink Mb—monkey C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine

DRAQ5 is a registered trademark of Biostatus Limited. DyLight is a trademark of Thermo Fisher Scientific Inc. and its subsidiaries. Tween is a registered trademark of ICI Americas, Inc.
**Immunohistochemical analysis of paraffin-embedded human breast carcinoma using Ezrin Antibody in the presence of control peptide (left) or antigen-specific peptide (right).**

**Flow cytometric analysis of untreated HeLa cells using Ezrin Antibody (blue) compared to a nonspecific negative control antibody (red).**

**Confocal immunofluorescent analysis of HeLa cells labeled with Ezrin Antibody (green). Actin filaments have been labeled with DyLight™ 554 Phalloidin #13054 (red). Blue pseudocolor = DRAQ5® (fluorescent DNA dye).**

**Immunohistochemical analysis of paraffin-embedded 4T1 syngeneic mouse tumor using Ezrin Antibody.**