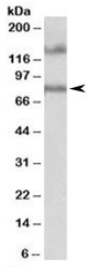
EPB41L5 Antibody / Band 4.1 Like Protein 5 Antibody (R33896)

Catalog No.	Formulation	Size
R33896-100UG	0.5 mg/ml in 1X TBS, pH7.3, with 0.5% BSA (US sourced) and 0.02% sodium azide	100 ug

Bulk quote request

Species Reactivity	Human
Format	Antigen affinity purified
Host	Goat
Clonality	Polyclonal (goat origin)
Isotype	Goat Ig
Purity	Antigen affinity
Gene ID	57669
Applications	Western blot: 1-3ug/ml ELISA (peptide) LOD: 1:8000
Limitations	This EPB41L5 Antibody / Band 4.1 Like Protein 5 Antibody is available for research use only.



EPB41L5 Antibody Human Hippocampus WB. Western blot testing of human hippocampus lysate using EPB41L5 antibody detected the expected band at approximately 80 kDa together with an additional band at approximately 140 kDa. Both bands were abolished by preincubation of the antibody with the immunizing peptide, supporting their specificity for EPB41L5 and suggesting the presence of higher molecular weight forms or protein complexes recognized by the antibody. This EPB41L5 Antibody, also called a Band 4.1 Like Protein 5 Antibody, is useful for investigating epithelial plasticity, cell adhesion, cytoskeletal organization, and tissue remodeling.

Description

EPB41L5 Antibody / Band 4.1 Like Protein 5 Antibody recognizes EPB41L5, a FERM domain-containing member of the protein 4.1 family that regulates cell adhesion, cytoskeletal organization, and epithelial plasticity. Although originally classified based on its sequence similarity to erythrocyte membrane protein band 4.1, EPB41L5 has emerged as an important regulator of epithelial-mesenchymal transition (EMT) and dynamic remodeling of cell-cell junctions. The protein functions at sites of membrane-cytoskeleton interaction, where it coordinates structural changes required for cell migration, tissue morphogenesis, and developmental remodeling.

Band 4.1 Like Protein 5 promotes reorganization of adherens junctions and focal adhesions by interacting with membrane-

associated proteins, actin cytoskeletal components, and signaling molecules that regulate cellular architecture. During epithelial-mesenchymal transition, EPB41L5 expression is induced by transcription factors including Snail, ZEB1, and TWIST, resulting in reduced epithelial adhesion and increased cellular motility. These activities enable normal embryonic development and wound repair while also contributing to pathological processes such as fibrosis and tumor invasion when aberrantly regulated.

Elevated EPB41L5 expression has been reported in numerous human malignancies, including breast, colorectal, pancreatic, gastric, lung, and melanoma, where it is associated with invasive behavior, metastatic potential, and poor clinical outcome. Beyond oncology, EPB41L5 contributes to kidney development, tissue morphogenesis, extracellular matrix remodeling, and maintenance of epithelial integrity. Ongoing research continues to investigate how EPB41L5 integrates cytoskeletal dynamics with cell signaling pathways that govern migration, polarity, and tissue organization.

This rabbit polyclonal antibody was developed for specific detection of EPB41L5 in research applications. Its broad reactivity with human, mouse, and rat samples makes it well suited for studies of epithelial biology, cell adhesion, tissue remodeling, and cancer progression. An EPB41L5 Antibody is a valuable research tool for investigating Band 4.1 Like Protein 5, epithelial plasticity, cytoskeletal organization, cell adhesion, and tissue morphogenesis.

For a broader overview of EPB41L5 biology, epithelial-mesenchymal transition, and cancer progression, see our EPB41L5 Antibody / Epithelial-Mesenchymal Transition Protein Antibody page.

Application Notes

Optimal dilution of the EPB41L5 Antibody / Band 4.1 Like Protein 5 Antibody should be determined by the researcher.

Immunogen

Amino acids ENLPQSPGTDQHD were used as the immunogen for this EPB41L5 antibody.

Storage

Aliquot and store the EPB41L5 antibody at -20oC.

Alternate Names

EPB41L5 antibody, Band 4.1 Like Protein 5 antibody, Erythrocyte Membrane Protein Band 4.1 Like 5 antibody, Epithelial-Mesenchymal Transition Protein antibody

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