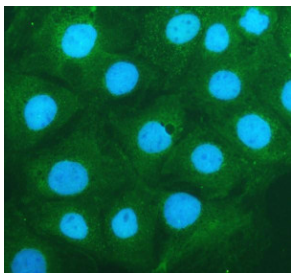
EPB41L5 Antibody / Epithelial-Mesenchymal Transition Protein Antibody (FY13498)

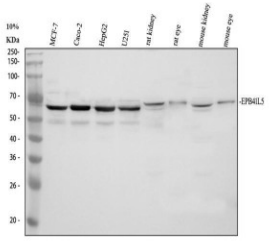
Catalog No.	Formulation	Size
FY13498	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

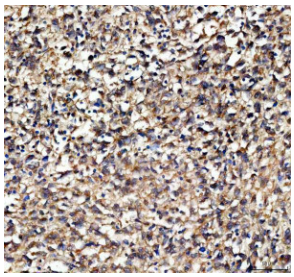
Species Reactivity	Human, Mouse, Rat
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen Affinity
Buffer	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4.
UniProt	Q9HCM4
Applications	Western Blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Immunofluorescence: 5ug/ml
Limitations	This EPB41L5 Antibody / Epithelial-Mesenchymal Transition Protein Antibody is available for research use only.



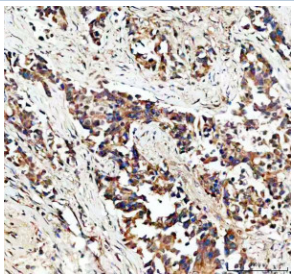
EPB41L5 Antibody Human Colon Cancer Cell IF. Immunofluorescent staining of CACO-2 cells using EPB41L5 antibody demonstrated predominantly cytoplasmic fluorescence (green) with enrichment along the cell periphery, consistent with the role of EPB41L5 in epithelial-mesenchymal transition, cell adhesion remodeling, and cytoskeletal organization. Cells were treated with enzyme antigen retrieval reagent for 15 minutes, blocked with 10% goat serum, and incubated with the primary antibody (5 ug/ml) overnight at 4Â°C. Fluoro488-conjugated goat anti-rabbit IgG was used as the secondary antibody, and nuclei were counterstained with DAPI (blue). This EPB41L5 Antibody, also called an Epithelial-Mesenchymal Transition Protein Antibody, is useful for investigating epithelial-mesenchymal transition, cell adhesion dynamics, tumor invasion, and metastatic progression.



EPB41L5 Antibody Human, Rat and Mouse WB. Western blot testing of human MCF-7 (lane 1), Caco-2 (lane 2), HepG2 (lane 3), U251 (lane 4), rat kidney (lane 5), rat eye (lane 6), mouse kidney (lane 7), and mouse eye (lane 8) lysates using EPB41L5 antibody detected a major band at approximately 58 kDa, consistent with one reported isoform of EPB41L5. Although an additional isoform of approximately 82 kDa has been described, the lower molecular weight form predominated under these experimental conditions. This EPB41L5 Antibody, also called an Epithelial-Mesenchymal Transition Protein Antibody, is useful for investigating epithelial-mesenchymal transition, cell adhesion remodeling, cytoskeletal organization, and cancer metastasis.



EPB41L5 Antibody Human Melanoma IHC. Immunohistochemical staining of FFPE human melanoma tissue using EPB41L5 antibody demonstrated predominantly membranous and cytoplasmic staining in tumor cells, consistent with the role of EPB41L5 in epithelial-mesenchymal transition, cell adhesion remodeling, and cell migration. Heat-induced epitope retrieval was performed in pH 8.0 EDTA buffer prior to staining. Tissue sections were blocked with 10% goat serum and incubated with the primary antibody (2 ug/ml) overnight at 4Â°C, followed by a peroxidase-conjugated goat anti-rabbit IgG secondary antibody. Immunoreactivity was visualized using an HRP Super Vision detection system with DAB as the chromogen. This EPB41L5 Antibody, also called an Epithelial-Mesenchymal Transition Protein Antibody, is useful for investigating epithelial-mesenchymal transition, cell adhesion remodeling, tumor invasion, and cancer metastasis.



EPB41L5 Antibody Human Lung Cancer IHC. Immunohistochemical staining of FFPE human lung cancer tissue using EPB41L5 antibody demonstrated predominantly membranous and cytoplasmic staining in malignant cells, consistent with the role of EPB41L5 in epithelial-mesenchymal transition, cell adhesion remodeling, and tumor cell migration. Heat-induced epitope retrieval was performed in pH 8.0 EDTA buffer prior to staining. Tissue sections were blocked with 10% goat serum and incubated with the primary antibody (2 ug/ml) overnight at 4Â°C, followed by a peroxidase-conjugated goat anti-rabbit IgG secondary antibody. Immunoreactivity was visualized using an HRP Super Vision detection system with DAB as the chromogen. This EPB41L5 Antibody, also called an Epithelial-Mesenchymal Transition Protein Antibody, is useful for investigating epithelial-mesenchymal transition, cell adhesion remodeling, tumor invasion, and metastatic progression.

Description

EPB41L5 Antibody / Epithelial-Mesenchymal Transition Protein Antibody recognizes EPB41L5, a FERM domain-containing protein that plays a central role in epithelial-mesenchymal transition (EMT), cell adhesion remodeling, and tissue morphogenesis. Although originally identified as a member of the protein 4.1 family, EPB41L5 is now best known for its ability to promote the loss of epithelial characteristics and acquisition of a migratory mesenchymal phenotype. During EMT, EPB41L5 is induced by transcription factors including Snail, ZEB1, and TWIST, where it facilitates disruption of cell-cell junctions and enhances cellular motility. These functions have established EPB41L5 as an important regulator of developmental processes, wound healing, fibrosis, and tumor progression.

EPB41L5 localizes primarily to sites of cell adhesion where it interacts with membrane-associated proteins and cytoskeletal components to regulate focal adhesions, extracellular matrix interactions, and actin organization. By promoting turnover of adhesion complexes and remodeling of epithelial architecture, EPB41L5 enables cells to detach from neighboring cells and migrate through surrounding tissues. In addition to its structural functions, EPB41L5 influences signaling pathways that control cell polarity, migration, invasion, and mechanical responses to the extracellular environment, making it an important mediator of dynamic tissue remodeling.

Aberrant EPB41L5 expression has been associated with numerous malignancies, including breast, colorectal, pancreatic,

gastric, and lung cancers, where elevated expression correlates with epithelial-mesenchymal transition, tumor invasion, metastasis, and poor clinical outcome. EPB41L5 has also been implicated in renal fibrosis, embryonic development, and organogenesis through its regulation of epithelial plasticity and extracellular matrix remodeling. Because epithelial-mesenchymal transition is a fundamental mechanism underlying both normal development and disease progression, EPB41L5 continues to receive considerable attention as a biomarker and potential therapeutic target in cancer and fibrosis research.

EPB41L5 integrates cytoskeletal remodeling with cell adhesion dynamics to coordinate epithelial plasticity during physiological and pathological processes. Its central role in epithelial-mesenchymal transition makes it an important model for understanding cell migration, tissue remodeling, and metastatic progression. An EPB41L5 Antibody is a valuable research tool for investigating epithelial-mesenchymal transition, cell adhesion remodeling, cytoskeletal organization, cancer metastasis, and tissue morphogenesis.

Explore additional research tools for tumor progression, cell signaling, and metastatic biology on our Cancer Marker Antibodies page.

Application Notes

Optimal dilution of the EPB41L5 Antibody / Epithelial-Mesenchymal Transition Protein Antibody should be determined by the researcher.

Immunogen

E.coli-derived human Band 4.1-like protein 5 recombinant protein (amino acids D38-L733) was used as the immunogen for the EPB41L5 Antibody.

Storage

After reconstitution, the EPB41L5 Antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

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

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