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CD144/VE Cadherin Rabbit pAb

Catalog # AP96440

Product Information

Application	WB
Primary Accession	P55284
Other Accession	P55284
Reactivity	Human
Predicted	Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	87903
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from mouse Vascular endothelial cell cadherin
Epitope Specificity	601-700/784
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 5 cadherin domains.
SUBUNIT	Interacts via cadherin 5 domain with PTPRB. Interacts with TRPC4. Interacts with KRIT1.
Post-translational modifications	Phosphorylated on tyrosine residues by KDR/VEGFR-2. Dephosphorylated by PTPRB.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	bs-0878P is onesynthetic peptide derived from mouse Vascular endothelial cell cadherin. This gene is a classical cadherin from the cadherin superfamily and is located in a six-cadherin cluster in a region on the long arm of chromosome 16 that is involved in loss of heterozygosity events in breast and prostate cancer. The encoded protein is a calcium-dependent cell-cell adhesion glycoprotein comprised of five extracellular cadherin repeats, a transmembrane region and a highly conserved cytoplasmic tail. Functioning as a classic cadherin by imparting to cells the ability to adhere in a homophilic manner, the protein may play an important role in endothelial cell biology through control of the cohesion and organization of the intercellular junctions. An alternative splice variant has been described but its full length sequence has not been determined. [provided by RefSeq, Jul 2008].

Additional Information

Gene ID	12562
Other Names	7B4; CD144; VE-Cad; VECD; VEcad; Vec; CADH5_HUMAN; CDH5; 7B4 antigen; Vascular endothelial cadherin (VE-cadherin); CADH5_MOUSE; cadherin 5; cadherin 5, type 2, VE-cadherin (vascular epithelium); cadherin 5, type 2 (vascular endothelium); VE-cadherin

Dilution	WB=1:500-2000,Flow-Cyt=1ug/Test
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	Cdh5 {ECO:0000312|MGI:MGI:105057}
Function	Cadherins are calcium-dependent cell adhesion proteins (By similarity). They preferentially interact with themselves in a homophilic manner in connecting cells; cadherins may thus contribute to the sorting of heterogeneous cell types (By similarity). This cadherin may play an important role in endothelial cell biology through control of the cohesion and organization of the intercellular junctions (PubMed:20332120, PubMed:9220534). It associates with alpha-catenin forming a link to the cytoskeleton (By similarity). Plays a role in coupling actin fibers to cell junctions in endothelial cells, via acting as a cell junctional complex anchor for AMOTL2 and MAGI1 (PubMed:24806444). Acts in concert with KRIT1 and PALS1 to establish and maintain correct endothelial cell polarity and vascular lumen (PubMed:27466317). These effects are mediated by recruitment and activation of the Par polarity complex and RAP1B (By similarity). Positively regulates reorientation of actin stress fibers and endothelial cell reorientation in response to cellular mechantransduction (By similarity). Required for activation of PRKCZ and for localization of phosphorylated PRKCZ, PARD3, TIAM1 and RAP1B to the cell junction (By similarity). Associates with CTNND1/p120-catenin to control CADH5 endocytosis (PubMed:33972531).
Cellular Location	Cell junction, adherens junction. Cell membrane; Single-pass type I membrane protein. Cytoplasm Note=Found at cell-cell boundaries and probably at cell-matrix boundaries. KRIT1 and CDH5 reciprocally regulate their localization to endothelial cell-cell junctions (By similarity) {ECO:0000250|UniProtKB:P33151}
Tissue Location	Expressed in postnatal endothelial cells of the retinal vascular plexus (at protein level)

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