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VE Cadherin Rabbit mAb

Catalog # AP76241

Product Information

Application	WB, IP
Primary Accession	P55284
Reactivity	Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	87903

Additional Information

Gene ID	12562
Other Names	Cdh5
Dilution	WB~~1:500-1:1000 IP~~1:50-1:100
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

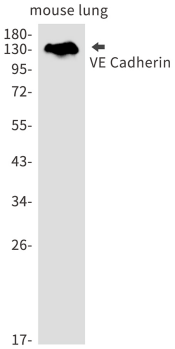
Name	Cdh5 {ECO:0000312|MGI:MGI:105057}
Function	Cadherins are calcium-dependent cell adhesion proteins (By similarity). They preferentially interact with themselves in a homophilic manner in connecting cells; cadherins may thus contribute to the sorting of heterogeneous cell types (By similarity). This 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)

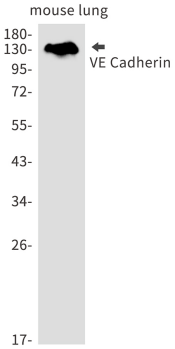
Background

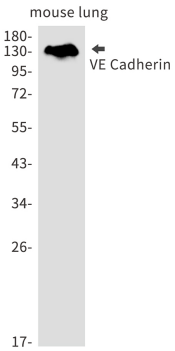
Cadherins are calcium-dependent cell adhesion proteins. They preferentially interact with themselves in a homophilic manner in connecting cells; cadherins may thus contribute to the sorting of heterogeneous cell types. This cadherin may play an important role in endothelial cell biology through control of the cohesion and organization of the intercellular junctions. Acts in concert with KRIT1 to establish and maintain correct endothelial cell polarity and vascular lumen. These effects are mediated by recruitment and activation of the Par polarity complex and RAP1B. Required for activation of PRKCZ and for localization of phosphorylated PRKCZ, PARD3, TIAM1 and RAP1B to the cell junction.

Images



Western blot analysis of VE Cadherin in mouse lung lysates using Cadherin 5 antibody.





Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.