

VE-Cadherin mouse Monoclonal Antibody(8E5)

Catalog # AP63782

Product Information

Application	IHC-P
Primary Accession	P33151
Reactivity	Human, Rat, Mouse
Host	Mouse
Clonality	Monoclonal
Calculated MW	87528

Additional Information

Gene ID	1003
Other Names	CDH5
Dilution	IHC-P~~IHC 1:100-200
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

Name	CDH5 (HGNC:1764)
Function	<p>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 (PubMed:21269602). This cadherin may play a important role in endothelial cell biology through control of the cohesion and organization of the intercellular junctions (By similarity). It associates with alpha-catenin forming a link to the cytoskeleton (PubMed:10861224). 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 (By similarity). Acts in concert with KRIT1 and PALS1 to establish and maintain correct endothelial cell polarity and vascular lumen (By similarity). These effects are mediated by recruitment and activation of the Par polarity complex and RAP1B (PubMed:20332120). Required for activation of PRKCZ and for the localization of phosphorylated PRKCZ, PARD3, TIAM1 and RAP1B to the cell junction (PubMed:20332120). Associates with CTNND1/p120-catenin to control CADH5 endocytosis (By similarity).</p>
Cellular Location	Cell junction, adherens junction. Cell membrane; Single-pass type I membrane protein. Cytoplasm {ECO:0000250 UniProtKB:P55284}.

Note=Found at cell-cell boundaries and probably at cell-matrix boundaries.
KRIT1 and CDH5 reciprocally regulate their localization to endothelial cell-cell junctions

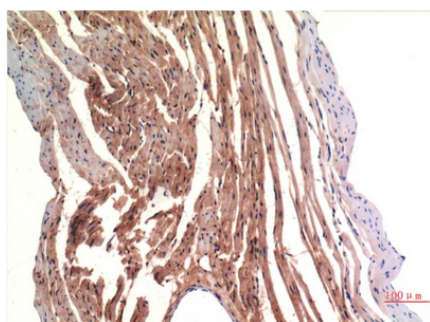
Tissue Location

Expressed in endothelial cells (at protein level) (PubMed:27338829).
Expressed in the brain (PubMed:2059658)

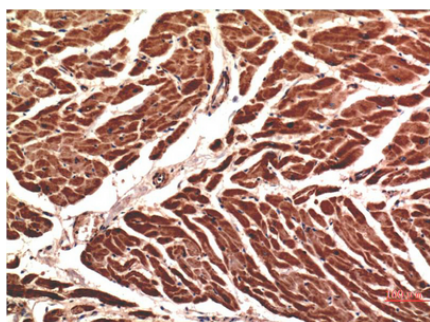
Background

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 a important role in endothelial cell biology through control of the cohesion and organization of the intercellular junctions. It associates with alpha-catenin forming a link to the cytoskeleton. 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 the localization of phosphorylated PRKCZ, PARD3, TIAM1 and RAP1B to the cell junction.

Images



Immunohistochemical analysis of paraffin-embedded Rat Heart Tissue using VE-Cadherin Mouse mAb diluted at 1:200.



Immunohistochemical analysis of paraffin-embedded Human Heart Tissue using VE-Cadherin Mouse mAb diluted at 1:200.

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