

# VE-Cadherin mouse Monoclonal Antibody(8E5)

Catalog # AP63782

Specification

## VE-Cadherin mouse Monoclonal Antibody(8E5) - Product Information

Application Primary Accession Reactivity Host Clonality IHC-P <u>P33151</u> Human, Rat, Mouse Mouse Monoclonal

### VE-Cadherin mouse Monoclonal Antibody(8E5) - Additional Information

Gene ID 1003

Other Names CDH5

**Dilution** IHC-P~~N/A

**Format** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions** -20°C

## VE-Cadherin mouse Monoclonal Antibody(8E5) - Protein Information

Name CDH5 (<u>HGNC:1764</u>)

#### 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 (PubMed:<a

href="http://www.uniprot.org/citations/21269602" target="\_blank">21269602</a>). 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:<a href="http://www.uniprot.org/citations/10861224" target="\_blank">10861224</a>). 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:<a

href="http://www.uniprot.org/citations/20332120" target="\_blank">20332120</a>). Required for activation of PRKCZ and for the localization of phosphorylated PRKCZ, PARD3, TIAM1 and RAP1B to the cell junction (PubMed:<a href="http://www.uniprot.org/citations/20332120" target=" blank">20332120</a>). Associates with CTNND1/p120-catenin to control CADH5



## endocytosis (By similarity).

#### **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

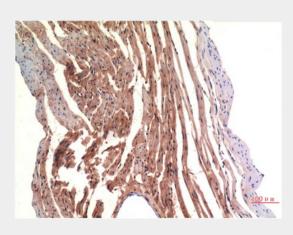
Expressed in endothelial cells (at protein level) (PubMed:27338829). Expressed in the brain (PubMed:2059658)

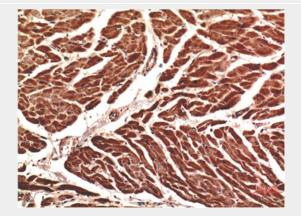
#### **VE-Cadherin mouse Monoclonal Antibody(8E5) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### VE-Cadherin mouse Monoclonal Antibody(8E5) - Images







## VE-Cadherin mouse Monoclonal Antibody(8E5) - 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.