

VE Cadherin Antibody (CDH5) (N-term) Blocking peptide
Synthetic peptide
Catalog # BP2724a**Specification**

VE Cadherin Antibody (CDH5) (N-term) Blocking peptide - Product InformationPrimary Accession [P33151](#)**VE Cadherin Antibody (CDH5) (N-term) Blocking peptide - Additional Information**

Gene ID 1003

Other Names

Cadherin-5, 7B4 antigen, Vascular endothelial cadherin, VE-cadherin, CD144, CDH5

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP2724a](/product/products/AP2724a) was selected from the N-term region of human CDH5. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

VE Cadherin Antibody (CDH5) (N-term) Blocking peptide - Protein InformationName CDH5 ([HGNC:1764](#))**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: [21269602](http://www.uniprot.org/citations/21269602)). This cadherin may play an 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](http://www.uniprot.org/citations/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: [21269602](#)).

href="http://www.uniprot.org/citations/20332120" target="_blank">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 CDH5 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 Antibody (CDH5) (N-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

VE Cadherin Antibody (CDH5) (N-term) Blocking peptide - Images

VE Cadherin Antibody (CDH5) (N-term) Blocking peptide - Background

CDH5 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. It 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.

VE Cadherin Antibody (CDH5) (N-term) Blocking peptide - References

Breviario F.,Arterioscler. Thromb. Vasc. Biol. 15:1229-1239(1995)Ali J.,Microcirculation 4:267-277(1997)Suzuki S.,Cell Regul. 2:261-270(1991)