

Anti-VE-Cadherin/CD144 Antibody

Catalog # ABO11385

Product Information

Application	WB, IHC-P
Primary Accession	P33151
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Cadherin-5(CDH5) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	1003
Other Names	Cadherin-5, 7B4 antigen, Vascular endothelial cadherin, VE-cadherin, CD144, CDH5
Calculated MW	87528
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat Western blot, 0.1-0.5 µg/ml, Human
Subcellular Localization	Cell junction . Cell membrane ; Single-pass type I membrane protein . Found at cell-cell boundaries and probably at cell-matrix boundaries. KRIT1 and CDH5 reciprocally regulate their localization to endothelial cell-cell junctions.
Tissue Specificity	Endothelial tissues and brain.
Source	Eukaryota
Protein Name	Cadherin-5
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human VE Cadherin(766-784aa RFKMLAELYGSDPREELLY), different from the related mouse and rat sequences by three amino acids.
Purification	Immunogen affinity purified.

Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After r ° Constitution, at 4 °C for one month. It ° Can also be aliquotted and stored frozen at -20 °C for a longer time.Avoid repeated freezing and thawing.

Protein Information

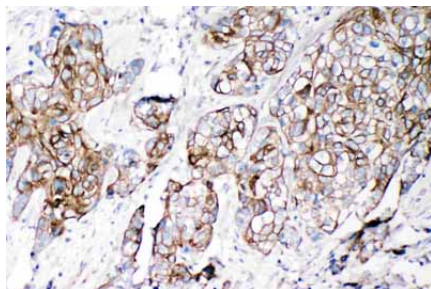
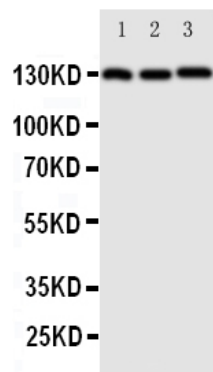
Name	CDH5 (HGNC:1764)
Function	Cadherins are calcium-dependent cell adhesion proteins (By similarity). They preferentially interact with themselves in a homophilic manner in connecting cells; cadherins may thus contribute to the sorting of heterogeneous cell types (PubMed: 21269602). This cadherin may 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). Positively regulates reorientation of actin stress fibers and endothelial cell reorientation in response to cellular mechanotransduction (PubMed: 25795300). 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).
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

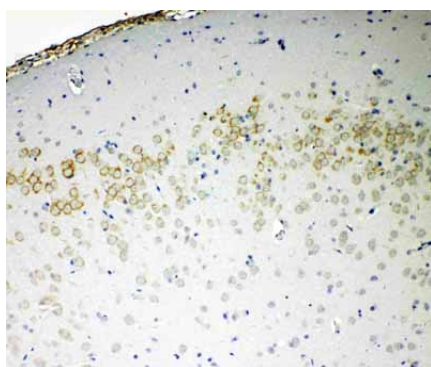
CDH5(Cadherin 5), also known as VE-cadherin, is a type of cadherin. It is encoded by the human gene CDH5. Kremmidiotis et al.(1998) mapped the human CDH5 gene to 16q22.1 using somatic cell hybrid panels. Functioning as a classic cadherin by imparting to cells the ability to adhere in a homophilic manner, the protein may play an important role in endothelial cell biology through control of the cohesion and organization of the intercellular junctions. Therefore it was concluded that VE-cadherin serves the purpose of maintaining newly formed vessels.

Images

Anti-VE Cadherin antibody, ABO11385, Western blottingAll lanes: Anti VE Cadherin (ABO11385) at 0.5ug/mlLane 1: A549 Whole Cell Lysate at 40ugLane 2: HELA Whole Cell Lysate at 40ugLane 3: MCF-7 Whole Cell Lysate at 40ugPredicted bind size: 87KDObserved bind size: 130KD



Anti-VE Cadherin antibody, ABO11385, IHC(P)IHC(P):
Human Lung Cancer Tissue



Anti-VE Cadherin antibody, ABO11385, IHC(P)IHC(P): Rat
Brain Tissue

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