

Anti-VE-Cadherin (C-terminal) Antibody

Catalog # AN1665

Specification

Anti-VE-Cadherin (C-terminal) Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype	WB <u>P33151</u> Bovine Rabbit Rabbit Polyclonal IgG 87528
Calculated MW	87528

Anti-VE-Cadherin (C-terminal) Antibody - Additional Information

Gene ID 1003 Other Names Cadherin-5, vascular endothelial Cadherin, CD144

Target/Specificity

Cadherins are transmembrane glycoproteins vital in calcium-dependent cell-cell adhesion during tissue differentiation. Cadherins cluster to form foci of homophilic binding units. A key determinant to the strength of the cadherin-mediated adhesion may be by the juxtamembrane region in cadherins. VE-cadherin (Cadherin 5) is the major cadherin found in endothelial cells and has important roles during angiogenesis and maintenance of barrier permeability. The cytoplasmic domain of VE-cadherin comprises the juxtamembrane domain that binds to the p120 catenin, and the carboxylterminal domain that interacts with β - or γ -catenins. Modulation of tyrosine phosphorylation on one or more of the nine tyrosine sites in the cytoplasmic domain may be important for regulating both angiogenesis and permeability. Phosphorylation of Tyr-658 and Tyr-731 alters catenin binding, restores cell migration, and decreases barrier permeability. While VEGF-induced phosphorylation of Tyr-685 occurs through c-Src, and regulates endothelial cell migration, but not permeability

Dilution WB~~1:1000

Format Antigen Affinity Purified

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Anti-VE-Cadherin (C-terminal) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping Blue Ice

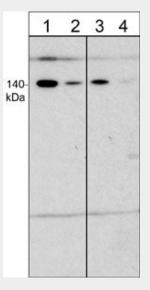


Anti-VE-Cadherin (C-terminal) Antibody - Protocols

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>

Anti-VE-Cadherin (C-terminal) Antibody - Images



Immunocytochemical labeling of VE-Cadherin in paraformaldehyde-fixed and NP-40-permeabilized human umbilical vein endothelial cells. The cells were labeled with rabbit polyclonal VE-Cadherin (a.a. 770-781), then the antibody was detected using appropriate secondary antibody conjugated to Cy3. Phase image (left) and fluorescent image (right).

Anti-VE-Cadherin (C-terminal) Antibody - Background

Cadherins are transmembrane glycoproteins vital in calcium-dependent cell-cell adhesion during tissue differentiation. Cadherins cluster to form foci of homophilic binding units. A key determinant to the strength of the cadherin-mediated adhesion may be by the juxtamembrane region in cadherins. VE-cadherin (Cadherin 5) is the major cadherin found in endothelial cells and has important roles during angiogenesis and maintenance of barrier permeability. The cytoplasmic domain of VE-cadherin comprises the juxtamembrane domain that binds to the p120 catenin, and the carboxylterminal domain that interacts with β - or γ -catenins. Modulation of tyrosine phosphorylation on one or more of the nine tyrosine sites in the cytoplasmic domain may be important for regulating both angiogenesis and permeability. Phosphorylation of Tyr-658 and Tyr-731 alters catenin binding, restores cell migration, and decreases barrier permeability. While VEGF-induced phosphorylation of Tyr-685 occurs through c-Src, and regulates endothelial cell migration, but not permeability