10320 Camino Santa Fe, Suite G
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# Anti-VE-Cadherin (Tyr-685), Phosphospecific Antibody

**Catalog # AN1666**

## Specification

### Anti-VE-Cadherin (Tyr-685), Phosphospecific Antibody - Product Information

| | |
|---|---|
| Primary Accession | P33151 |
| Reactivity | **Bovine** |
| Host | **Rabbit** |
| Clonality | **Rabbit Polyclonal** |
| Isotype | **IgG** |
| Calculated MW | **87528** |

### Anti-VE-Cadherin (Tyr-685), Phosphospecific 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

**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 (Tyr-685), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Shipping**
Blue Ice

### Anti-VE-Cadherin (Tyr-685), Phosphospecific Antibody - Protocols

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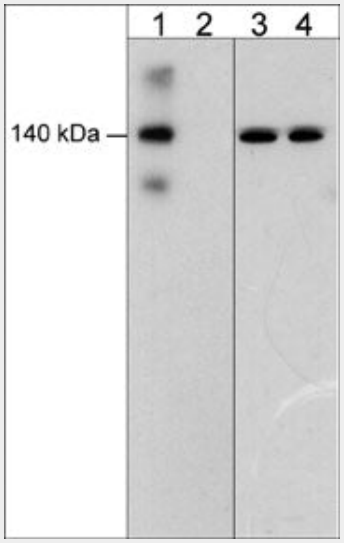
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

**Anti-VE-Cadherin (Tyr-685), Phosphospecific Antibody - Images**




Western blot image of human umbilical vein endothelial cells stimulated with pervanadate (1 mM) for 30 min. then the blots were untreated (lanes 1 & 3) or treated with alkaline phosphatase (lanes 2 & 4). The blots were probed with rabbit polyclonal anti-VE-cadherin (Tyr-685) (lanes 1 & 2) or mouse monoclonal anti-VE-cadherin (lanes 3 & 4).

**Anti-VE-Cadherin (Tyr-685), Phosphospecific 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