

## Rabbit VE-Cadherin Polyclonal Antibody | anti-VE antibody

Phospho-VE-Cadherin (Tyr658) Antibody

| CATALOG # | HOST   | REACTIVITY                                                                                                              | APPLICATIONS        |
|-----------|--------|-------------------------------------------------------------------------------------------------------------------------|---------------------|
| AAA329758 | Rabbit | Human, Mouse<br>Predicted Reactivity: Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Dog (100%), Chicken (100%) | ELISA, Western Blot |

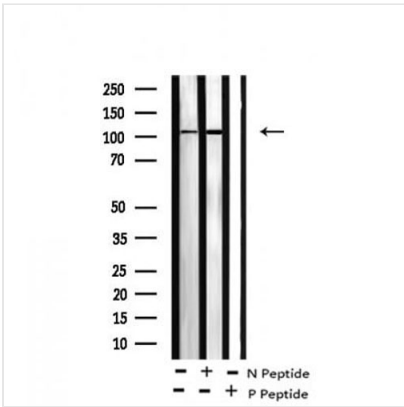
### PRODUCT SYNONYMS

VE-Cadherin; Polyclonal Antibody; Phospho-VE-Cadherin (Tyr658) Antibody; 7B 4; 7B4; 7B4 antigen; CADH5\_HUMAN; Cadherin 5; Cadherin 5 type 2; type 2 (vascular endothelium); type 2; VE cadherin (vascular epithelium); cadherin; vascular endothelial; 1; Cadherin-5; Cadherin5; CD 144; CD144; CD144 antigen; CDH 5; CDH5; CDH5 protein; Endothelial specific cadherin; FLJ17376; OTTHUMP00000174777; Vascular endothelial cadherin; Vascular epithelium cadherin; VE Cad; VE-cadherin; VEC; anti-VE antibody

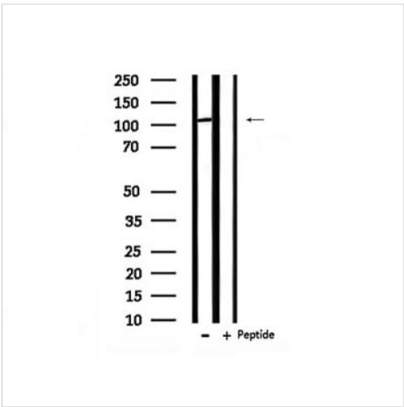
### PRODUCT SPECIFICATIONS

|                                              |                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                         | Rabbit                                                                                                                                                                                                                                                                                                                                              |
| Reactivity                                   | Human, Mouse<br>Predicted Reactivity: Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Dog (100%), Chicken (100%)                                                                                                                                                                                                                             |
| Clonality                                    | Polyclonal                                                                                                                                                                                                                                                                                                                                          |
| Isotype                                      | Rabbit IgG                                                                                                                                                                                                                                                                                                                                          |
| Specificity                                  | Phospho-VE-Cadherin (Tyr658) Antibody detects endogenous levels of VE-Cadherin only when phosphorylated at Tyr658.<br>Tissue Specificity: Endothelial tissues and brain.                                                                                                                                                                            |
| Purity/Purification                          | The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.                                                                                                                                                                                      |
| Form/Format                                  | Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.                                                                                                                                                                                                                                            |
| Concentration                                | 1mg/ml (varies by lot)                                                                                                                                                                                                                                                                                                                              |
| Applicable Applications for anti-VE antibody | ELISA (Peptide ELISA), WB (Western Blot)                                                                                                                                                                                                                                                                                                            |
| Immunogen                                    | A synthesized peptide derived from human VE-Cadherin around the phosphorylation site of Tyr658.                                                                                                                                                                                                                                                     |
| Conjugation                                  | Unconjugated                                                                                                                                                                                                                                                                                                                                        |
| Fragment                                     | Fab fragment                                                                                                                                                                                                                                                                                                                                        |
| Post Translational Modifications             | Phosphorylated on tyrosine residues byKDR/VEGFR-2. Dephosphorylated by PTPRB (By similarity).O-glycosylated.                                                                                                                                                                                                                                        |
| Subunit Structure                            | Interacts (via cadherin 5 domain) with PTPRB (By similarity). Interacts with TRPC4. Interacts with KRIT1. Interacts with PARD3 (By similarity). Interacts with RTN4 (isoform B). Interacts with MPP5; the interaction promotes MPP5 localization to cell junctions and is required for CDH5-mediated vascular lumen formation and endothelial cell. |
| Similarity                                   | Three calcium ions are usually bound at the interface of each cadherin domain and rigidify the connections, imparting a strong curvature to the full-length ectodomain.                                                                                                                                                                             |
| Subcellular Location                         | Cell junction. Cell membrane>Single-pass type I membrane protein.<br>Note: Found at cell-cell boundaries and probably at cell-matrix boundaries. KRIT1 and CDH5 reciprocally regulate their localization to endothelial cell-cell junctions.                                                                                                        |
| Preparation and Storage                      | Store at -20 degree C. Stable for 12 months from date of receipt.                                                                                                                                                                                                                                                                                   |

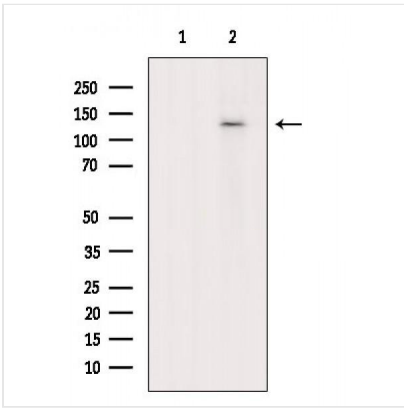
IMAGES



**WB (Western Blot)**  
Western blot analysis of VE-Cadherin (Phospho-Tyr658) using MDA-MB-435 whole cell lysates. -/+ means absence or presence of N peptide/non-phospho peptide) and P peptide(phospho peptide).



**WB (Western Blot)**  
Western blot analysis of extracts from 293, using VE-Cadherin (Phospho-Tyr658) Antibody.



**WB (Western Blot)**  
Western blot analysis of extracts from Mouse heart, using Phospho-VE-Cadherin (Tyr658) Antibody. The lane on the left was treated with blocking peptide.

ADDITIONAL INFORMATION

|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-VE antibody | 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. 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. Acts in concert with KRIT1 and MPP5 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. Required for activation of PRKCZ and for the localization of phosphorylated PRKCZ, PARD3, TIAM1 and RAP1B to the cell junction. |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

NCBI AND UNIPROT INFORMATION

|                           |                          |
|---------------------------|--------------------------|
| NCBI GI #                 | 166362713                |
| NCBI GeneID               | 1003                     |
| NCBI Accession #          | NP_001786.2              |
| NCBI GenBank Nucleotide # | NM_001795.3              |
| UniProt Accession #       | P33151                   |
| Molecular Weight          | 87,528 Da                |
| NCBI Official Full Name   | cadherin-5 preproprotein |

|                                  |                                                                                                                                                                          |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI Official Synonym Full Names | cadherin 5, type 2 (vascular endothelium)                                                                                                                                |
| NCBI Official Symbol             | CDH5                                                                                                                                                                     |
| NCBI Official Synonym Symbols    | 7B4; CD144                                                                                                                                                               |
| NCBI Protein Information         | cadherin-5; 7B4 antigen; VE-cadherin; cd144 antigen; endothelial-specific cadherin; vascular endothelial cadherin; cadherin 5, type 2, VE-cadherin (vascular epithelium) |
| UniProt Protein Name             | Cadherin-5                                                                                                                                                               |
| UniProt Gene Name                | <b>CDH5</b>                                                                                                                                                              |
| UniProt Synonym Gene Names       | VE-cadherin                                                                                                                                                              |
| UniProt Entry Name               | CADH5_HUMAN                                                                                                                                                              |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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 Online datasheet: <https://stage.aaabiotech.com/polyclonal/ve-cadherin-antibody-peptide-elisa-western-blot-elisa/329758>