

For Research Use Only

# VE-cadherin/CD144 Recombinant antibody



Catalog Number: 83766-2-RR

## Basic Information

<b>Catalog Number:</b> 83766-2-RR	<b>GenBank Accession Number:</b> NM_001795.5	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1000 ug/ml	<b>GeneID (NCBI):</b> 1003	<b>CloneNo.:</b> 240755D8
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P33151-1	<b>Recommended Dilutions:</b> WB 1:2000-1:10000 IHC 1:150-1:600 IF/ICC 1:150-1:600
<b>Isotype:</b> IgG	<b>Full Name:</b> cadherin 5, type 2 (vascular endothelium)	
	<b>Calculated MW:</b> 88 kDa	
	<b>Observed MW:</b> 130 kDa, 100 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, ELISA	<b>Positive Controls:</b> WB : HUVEC cells, human placenta tissue IHC : human placenta tissue, IF/ICC : HUVEC cells,
<b>Species Specificity:</b> human	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

Cadherins are a family of transmembrane glycoproteins that mediate calcium-dependent cell-cell adhesion and play an important role in the maintenance of normal tissue architecture. Vascular endothelial cadherin (VE-cadherin), also known as Cadherin-5 (CDH5) or CD144, is a member of the type II classical cadherin family of cell adhesion proteins (PMID: 21269602). VE-cadherin is expressed specifically in endothelial cells and mediates homophilic adhesion in the vascular endothelium (PMID: 1522121; 8555485; 21269602). VE-cadherin plays a role in the organization of lateral endothelial junctions and in the control of permeability properties of vascular endothelium (PMID: 1522121). VE-cadherin has also been shown to be required for angiogenesis (PMID: 16473763; 18162609). The calculated molecular weight of VE-cadherin is 88 kDa and the apparent molecular weight of 120-140 kDa is higher due to post-translational glycosylation and phosphorylation (PMID: 10460833; 29894844). Full-length VE-cadherin can be proteolytically cleaved to generate a fragment of 90-100 kDa (PMID: 9786462; 22064597).

## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

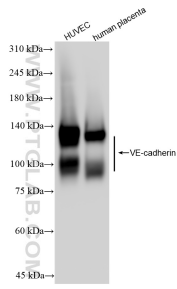
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

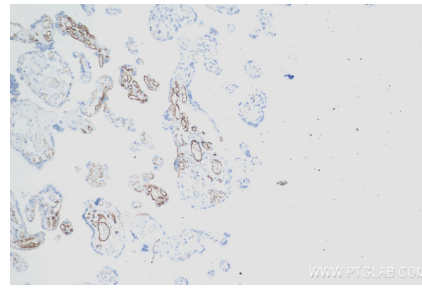
W: [ptgcn.com](http://ptgcn.com)

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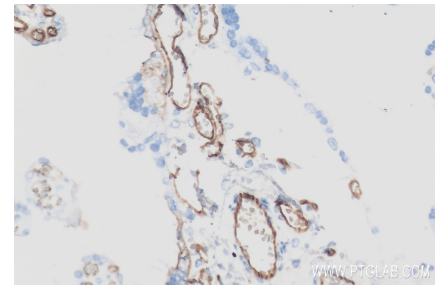
## Selected Validation Data



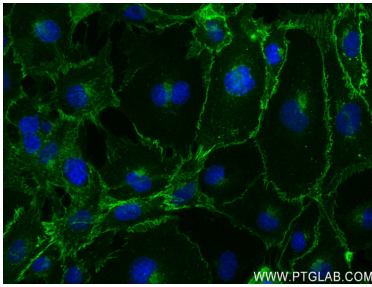
Various lysates were subjected to SDS PAGE followed by western blot with 83766-2-RR (VE-cadherin/CD144 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



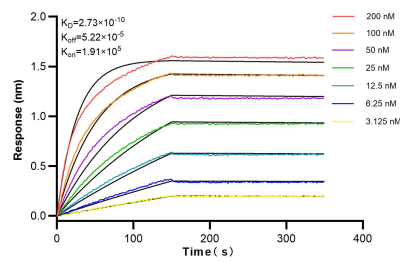
Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 83766-2-RR (VE-cadherin antibody) at dilution of 1:300 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 83766-2-RR (VE-cadherin/CD144 antibody) at dilution of 1:300 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HUVEC cells using VE-cadherin antibody (83766-2-RR, Clone: 240755D8) at dilution of 1:300 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Biolayer interferometry (BLI) kinetic assays of 83766-2-RR against Human VE-cadherin were performed. The affinity constant is 0.273 nM.