

For Research Use Only

# VE-cadherin/CD144 Polyclonal antibody

Catalog Number: 27956-1-AP

23 Publications



## Basic Information

<b>Catalog Number:</b> 27956-1-AP	<b>GenBank Accession Number:</b> NM_001795	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 500 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1003	<b>Recommended Dilutions:</b> WB 1:1000-1:4000
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P33151	IHC 1:500-1:2000
<b>Isotype:</b> IgG	<b>Full Name:</b> cadherin 5, type 2 (vascular endothelium)	IF/ICC 1:50-1:500
<b>Immunogen Catalog Number:</b> AG27487	<b>Calculated MW:</b> 88 kDa	
	<b>Observed MW:</b> 120-140 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, FC, ELISA	<b>Positive Controls:</b> WB : HUVEC cells, human placenta tissue
<b>Cited Applications:</b> WB, IHC, IF	IHC : human placenta tissue, human breast cancer tissue, human lung cancer tissue
<b>Species Specificity:</b> human	IF/ICC : HUVEC cells,
<b>Cited Species:</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).

## Notable Publications

Author	Pubmed ID	Journal	Application
Pengwei Deng	36354579	Bioengineering (Basel)	IF
Xiang-Hua Yu	36321394	Oral Dis	IF
Zhaoke Wu	35155276	Front Cell Infect Microbiol	WB

## Storage

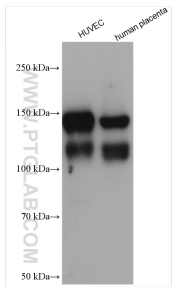
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

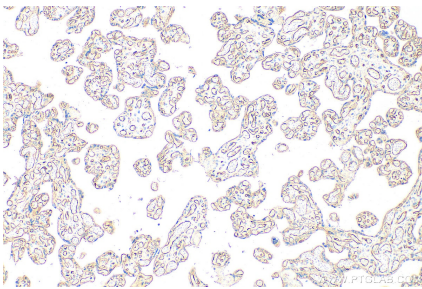
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

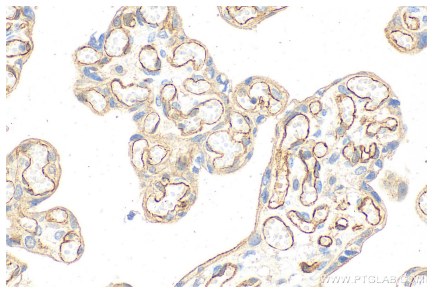
Selected Validation Data



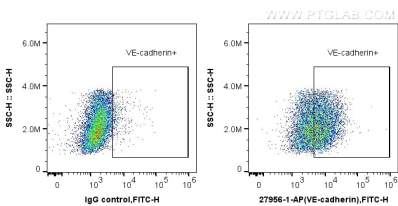
Various lysates were subjected to SDS PAGE followed by western blot with 27956-1-AP (VE-cadherin antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



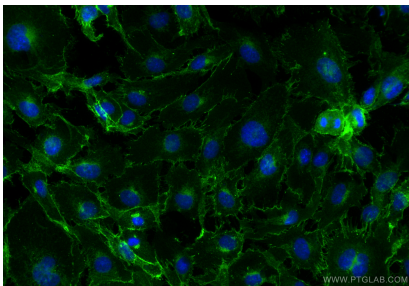
Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 27956-1-AP (VE-cadherin antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



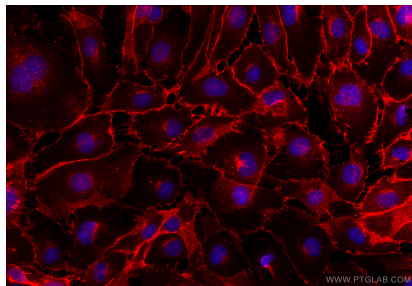
Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 27956-1-AP (VE-cadherin antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10<sup>6</sup> HUVEC cells were surface stained with 0.4 ug Anti-Human VE-cadherin (27956-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000, or 0.4 ug Control Antibody. Cells were not fixed.



Immunofluorescent analysis of (4% PFA) fixed HUVEC cells using VE-cadherin/CD144 antibody (27956-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Immunofluorescent analysis of (4% PFA) fixed HUVEC cells using VE-cadherin/CD144 antibody (27956-1-AP) at dilution of 1:200 and CoraLite®594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4).