

For Research Use Only

# VE-cadherin/CD144 Monoclonal antibody

Catalog Number: 66804-1-Ig

34 Publications



## Basic Information

<b>Catalog Number:</b> 66804-1-Ig	<b>GenBank Accession Number:</b> NM_001795	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul , Concentration: 1500 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1003	<b>CloneNo.:</b> 4F9B10
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P33151	<b>Recommended Dilutions:</b> WB 1:1000-1:6000 IHC 1:100-1:400 IF-P 1:200-1:800 IF/ICC 1:750-1:3000
<b>Isotype:</b> IgG1	<b>Full Name:</b> cadherin 5, type 2 (vascular endothelium)	
<b>Immunogen Catalog Number:</b> AG27501	<b>Calculated MW:</b> 88 kDa	
	<b>Observed MW:</b> 125 kDa, 100 kDa	

## Applications

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

## Notable Publications

Author	Pubmed ID	Journal	Application
Xiaoyi Zhang	36131066	Cancer Gene Ther	WB
Kexin Ma	32961493	Ecotoxicol Environ Saf	
Min Zhang	33173719	Adv Sci (Weinh)	

## Storage

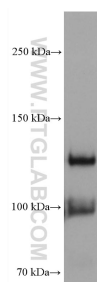
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

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

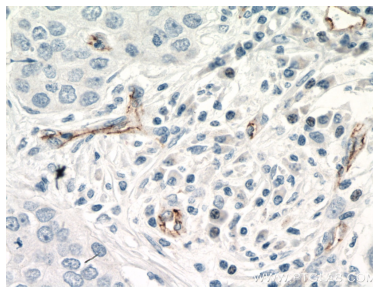
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

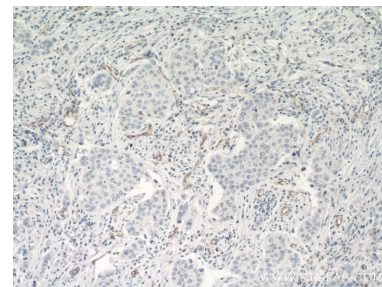
## Selected Validation Data



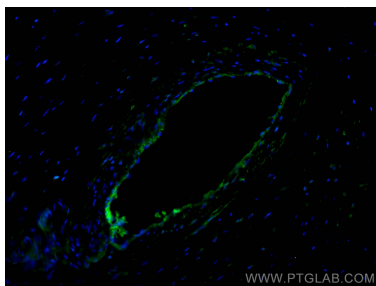
human placenta tissue were subjected to SDS PAGE followed by western blot with 66804-1-Ig (VE-cadherin antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



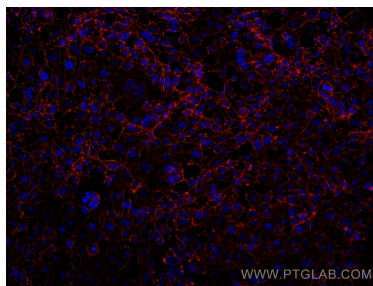
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66804-1-Ig (VE-cadherin antibody) at dilution of 1:400 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66804-1-Ig (VE-cadherin antibody) at dilution of 1:400 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed human placenta tissue using VE-cadherin antibody (66804-1-Ig, Clone: 4F9B10) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of un-fixed HUVEC cells using VE-cadherin/CD144 antibody (66804-1-Ig, Clone: 4F9B10) at dilution of 1:1500 and Multi-rAb CoraLite® Plus 594-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM004).