

VE-cadherin/CD144 Recombinant antibody

Catalog Number: 83766-2-RR

Basic Information

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

Applications

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

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

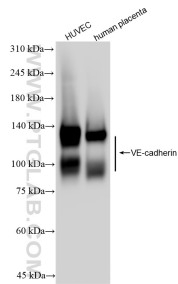
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

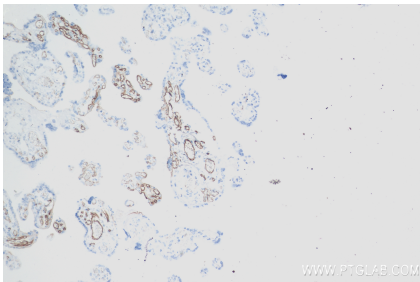
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

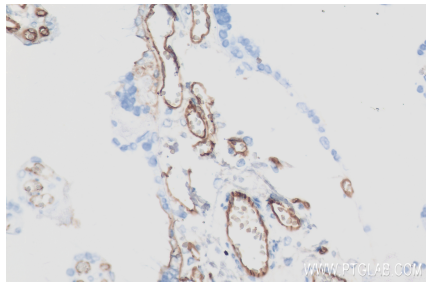
Selected Validation Data



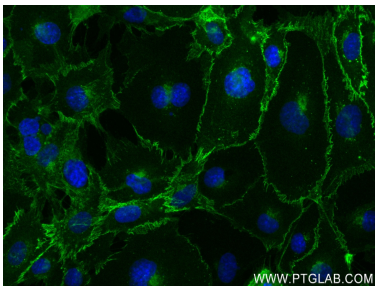
Various lysates were subjected to SDS PAGE followed by western blot with 83766-2-RR (VE-cadherin/CD144 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



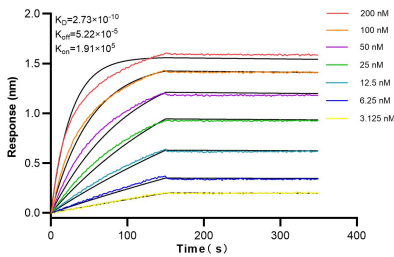
Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 83766-2-RR (VE-cadherin antibody) at dilution of 1:300 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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.