

For Research Use Only

# VE-cadherin/CD144 Recombinant antibody, PBS Only (Capture)

Catalog Number: 83766-2-PBS



## Basic Information

Catalog Number:	83766-2-PBS	GenBank Accession Number:	NM_001795.5	Purification Method:	Protein A purification
Size:	1 mg/ml	GeneID (NCBI):	1003	CloneNo.:	240755D8
Source:	Rabbit	UNIPROT ID:	P33151-1		
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, Cytometric bead array, Indirect ELISA

**Species Specificity:**  
human

## 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 -80°C.  
**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

**Storage Buffer:**  
PBS Only

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

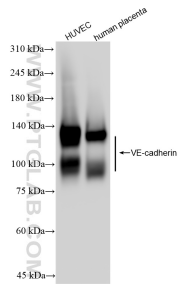
T: 4006900926

E: Proteintech-CN@ptglab.com

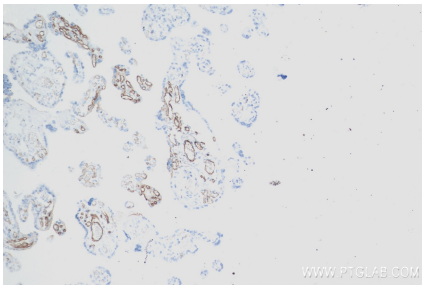
W: ptgcn.com

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

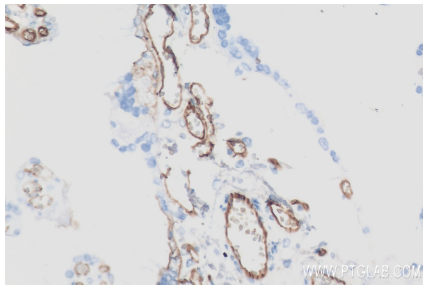
## Selected Validation Data



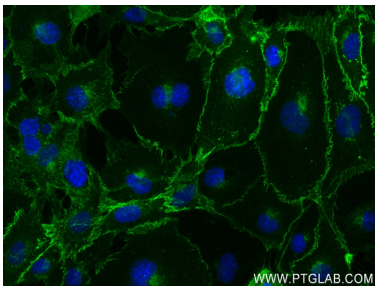
Various lysates were subjected to SDS PAGE followed by western blot with 83766-2-RR (VE-cadherin/CD144 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83766-2-PBS in a different storage buffer formulation.



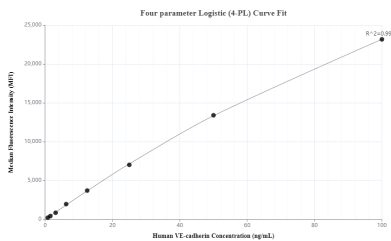
Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 83766-2-RR (VE-cadherin antibody) at dilution of 1:300 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83766-2-PBS in a different storage buffer formulation.



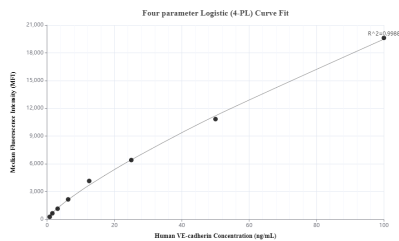
Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 83766-2-RR (VE-cadherin/CD144 antibody) at dilution of 1:300 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83766-2-PBS in a different storage buffer formulation.



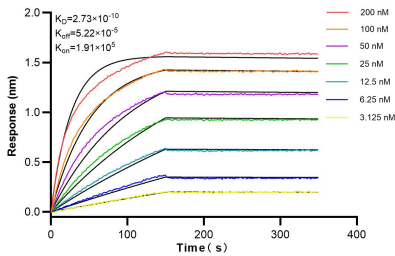
Immunofluorescent analysis of (4% PFA) fixed HUVEC cells using VE-cadherin antibody (83766-2-RR, Clone: 240755D8) at dilution of 1:300 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83766-2-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00752-1, VE-cadherin/CD144 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83766-2-PBS. Detection antibody: 83766-4-PBS. Standard: Eg1200. Range: 0.78-100 ng/mL.



Cytometric bead array standard curve of MP00752-2, VE-cadherin/CD144 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83766-2-PBS. Detection antibody: 83766-3-PBS. Standard: Eg1200. Range: 0.78-100 ng/mL.



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