

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: 100ug, Concentration: 1 mg/ml by Nanodrop;	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

Product Information

83766-2-PBS targets VE-cadherin/CD144 as part of a matched antibody pair:

MP00752-1: 83766-2-PBS capture and 83766-4-PBS detection (validated in Cytometric bead array)

MP00752-2: 83766-2-PBS capture and 83766-3-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

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.

Storage Buffer:
PBS Only

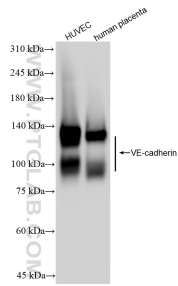
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

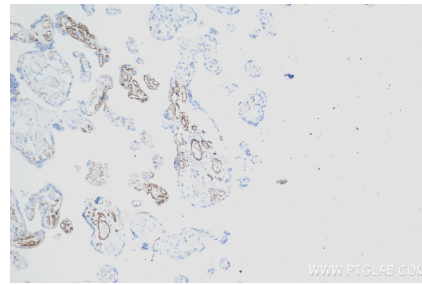
E: proteintech@ptglab.com
W: ptglab.com

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

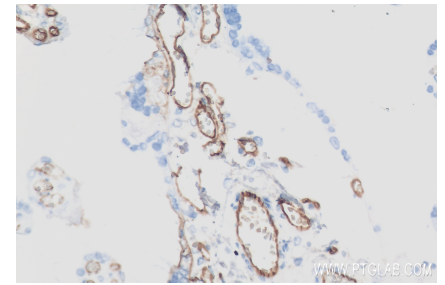
Selected Validation Data



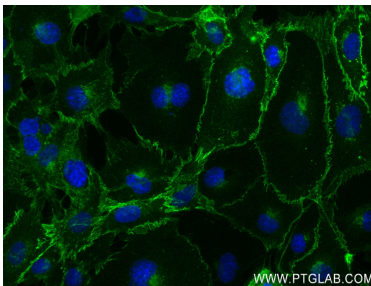
Various lysates were subjected to SDS PAGE followed by western blot with 83766-2-RR (VE-cadherin/CD144 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83766-2-PBS in a different storage buffer formulation.



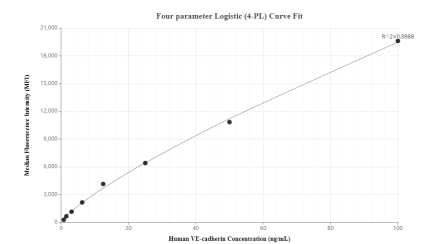
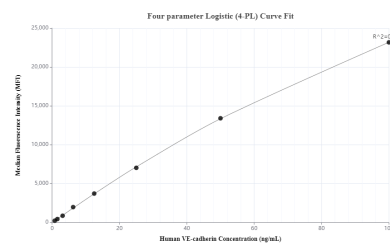
Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 83766-2-RR (VE-cadherin antibody) at dilution of 1:300 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83766-2-PBS in a different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

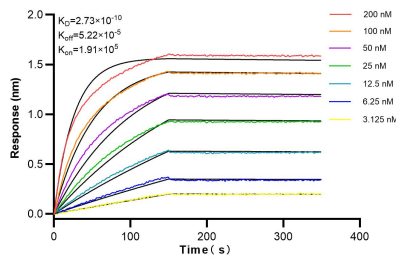


Immunofluorescent analysis of (4% PFA) fixed HUVEC cells using VE-cadherin antibody (83766-2-RR, Clone: 240755D8) at dilution of 1:300 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83766-2-PBS in a different storage 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 were performed. The affinity constant is 0.273 nM.