For Research Use Only

VE-cadherin/CD144 Polyclonal antibody

Catalog Number:27956-1-AP

23 Publications

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Basic Information

Catalog Number:
27956-1-AP

Concentration:
500 ug/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG27487

GenBank Accession Number:
NM_001795

GeneID (NCBI):
1003

UNIPROT ID:
P33151

Full Name:
cadherin 5, type 2 (vascular endothelium)

Calculated MW:
88 kDa

Observed MW:
120-140 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:1000-1:4000
IHC 1:500-1:2000
IF/ICC 1:50-1:500

Applications

Tested Applications:
WB, IHC, IF/ICC, FC, ELISA

Cited Applications:
WB, IHC, IF

Species Specificity:
human

Cited Species:
human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : HUVEC cells, human placenta tissue

IHC : human placenta tissue, human breast cancer tissue, human lung cancer 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).

Notable Publications

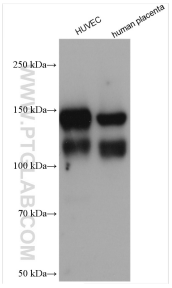
Author	Pubmed ID	Journal	Application
Pengwei Deng	36354579	Bioengineering (Basel)	IF
Xiang-Hua Yu	36321394	Oral Dis	IF
Zhaoke Wu	35155276	Front Cell Infect Microbiol	WB

Storage

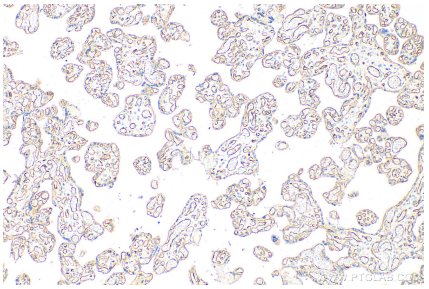
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

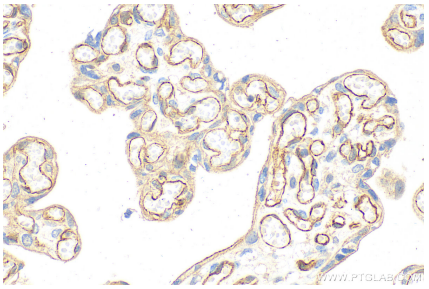
Selected Validation Data



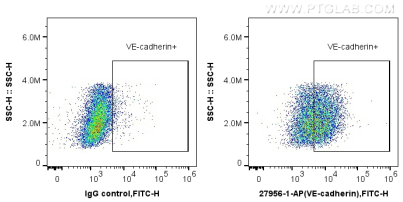
Various lysates were subjected to SDS PAGE followed by western blot with 27956-1-AP (VE-cadherin antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



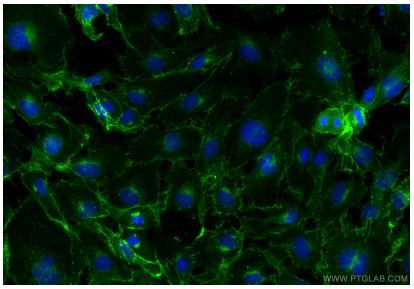
Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 27956-1-AP (VE-cadherin antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



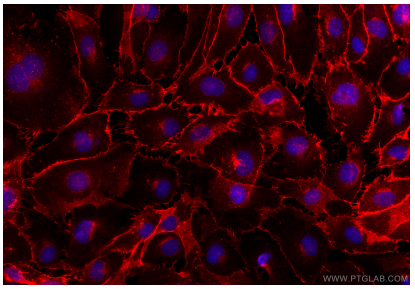
Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 27956-1-AP (VE-cadherin antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10^6 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).