

## ARG40764 anti-VE Cadherin antibody

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes VE Cadherin
Tested Reactivity	Hu
Predict Reactivity	Ms, Rat
Tested Application	FACS, ICC/IF, IHC-Fr, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	VE Cadherin
Species	Human
Immunogen	Recombinant protein corresponding to D48-R272 of Human VE Cadherin.
Conjugation	Un-conjugated
Alternate Names	7B4 antigen; 7B4; Cadherin-5; VE-cadherin; CD144; CD antigen CD144; Vascular endothelial cadherin

### Application Instructions

Application table	Application	Dilution
	FACS	1:150 - 1:500
	ICC/IF	1:200 - 1:1000
	IHC-Fr	1:200 - 1:1000
	IHC-P	1:200 - 1:1000
	WB	1:500 - 1:2000

**Application Note** IHC-P: Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min.  
\* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

### Properties

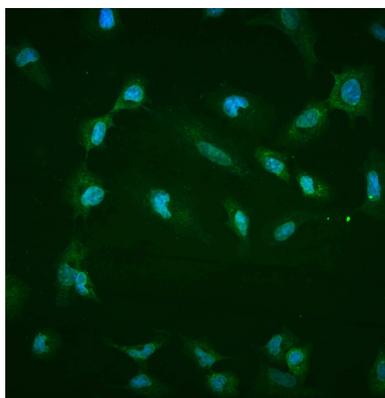
Form	Liquid
Buffer	0.2% Na <sub>2</sub> HPO <sub>4</sub> , 0.9% NaCl, 0.05% Sodium azide and 4% Trehalose.
Preservative	0.05% Sodium azide
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml

<b>Storage instruction</b>	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
<b>Note</b>	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

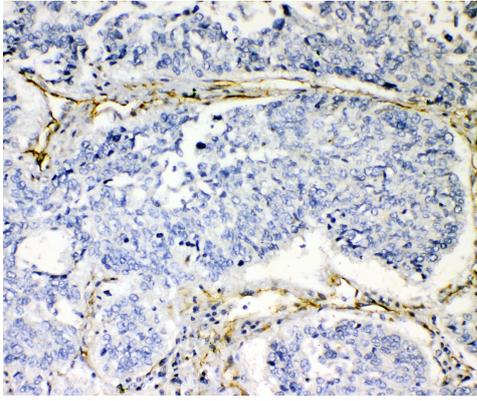
<b>Gene Symbol</b>	CDH5
<b>Gene Full Name</b>	cadherin 5, type 2 (vascular endothelium)
<b>Background</b>	This gene is a classical cadherin from the cadherin superfamily and is located in a six-cadherin cluster in a region on the long arm of chromosome 16 that is involved in loss of heterozygosity events in breast and prostate cancer. The encoded protein is a calcium-dependent cell-cell adhesion glycoprotein comprised of five extracellular cadherin repeats, a transmembrane region and a highly conserved cytoplasmic tail. Functioning as a classic cadherin by imparting to cells the ability to adhere in a homophilic manner, the protein may play an important role in endothelial cell biology through control of the cohesion and organization of the intercellular junctions. An alternative splice variant has been described but its full length sequence has not been determined. [provided by RefSeq, Jul 2008]
<b>Function</b>	Cadherins are calcium-dependent cell adhesion proteins. They preferentially interact with themselves in a homophilic manner in connecting cells; cadherins may thus contribute to the sorting of heterogeneous cell types. This cadherin may play a important role in endothelial cell biology through control of the cohesion and organization of the intercellular junctions. It associates with alpha-catenin forming a link to the cytoskeleton. Acts in concert with KRIT1 to establish and maintain correct endothelial cell polarity and vascular lumen. These effects are mediated by recruitment and activation of the Par polarity complex and RAP1B. Required for activation of PRKCZ and for the localization of phosphorylated PRKCZ, PARD3, TIAM1 and RAP1B to the cell junction. [UniProt]
<b>Calculated Mw</b>	88 kDa (unmodified); 90 - 140 kDa (glycosylated)
<b>PTM</b>	Phosphorylated on tyrosine residues by KDR/VEGFR-2. Dephosphorylated by PTPRB (By similarity).  O-glycosylated. [UniProt]
<b>Cellular Localization</b>	Cell junction. Cell membrane; Single-pass type I membrane protein. Note=Found at cell-cell boundaries and probably at cell-matrix boundaries. KRIT1 and CDH5 reciprocally regulate their localization to endothelial cell-cell junctions. [UniProt]

## Images



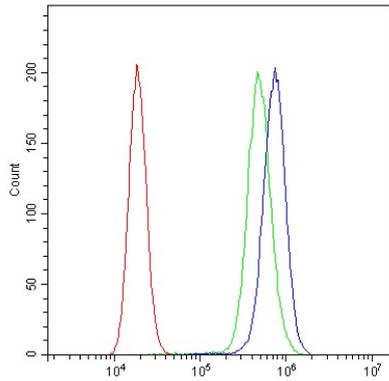
ARG40764 anti-VE Cadherin antibody ICC/IF image

Immunofluorescence: A549 cells were blocked with 10% goat serum and then stained with ARG40764 anti-VE Cadherin antibody (green) at 4 µg/ml dilution, overnight at 4°C. DAPI (blue) for nuclear staining.



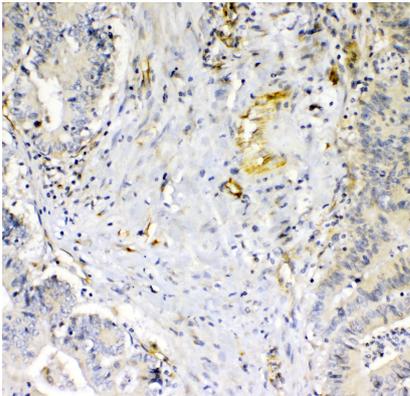
ARG40764 anti-VE Cadherin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human lung cancer tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG40764 anti-VE Cadherin antibody at 1  $\mu\text{g}/\text{ml}$ , overnight at 4°C.



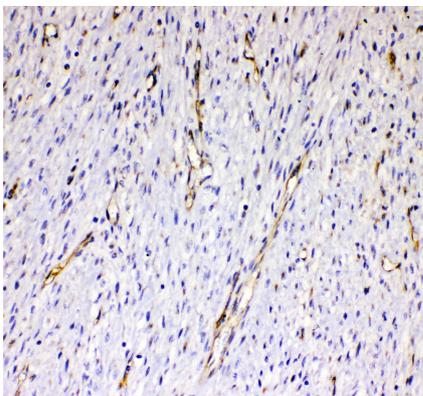
ARG40764 anti-VE Cadherin antibody FACS image

Flow Cytometry: A431 cells were blocked with 10% normal goat serum and then stained with ARG40764 anti-VE Cadherin antibody (blue) at 1  $\mu\text{g}/10^6$  cells for 30 min at 20°C, followed by incubation with DyLight®488 labelled secondary antibody. Isotype control antibody (green) was Rabbit IgG (1  $\mu\text{g}/10^6$  cells) used under the same conditions. Unlabelled sample (red) was also used as a control.



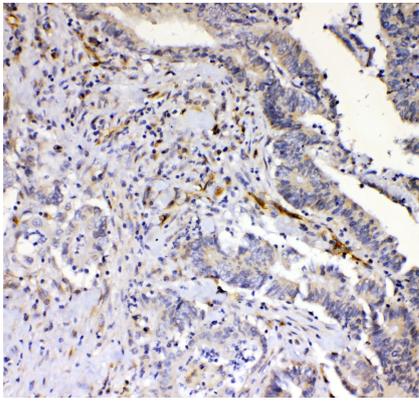
ARG40764 anti-VE Cadherin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human mammary cancer tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG40764 anti-VE Cadherin antibody at 1  $\mu\text{g}/\text{ml}$ , overnight at 4°C.



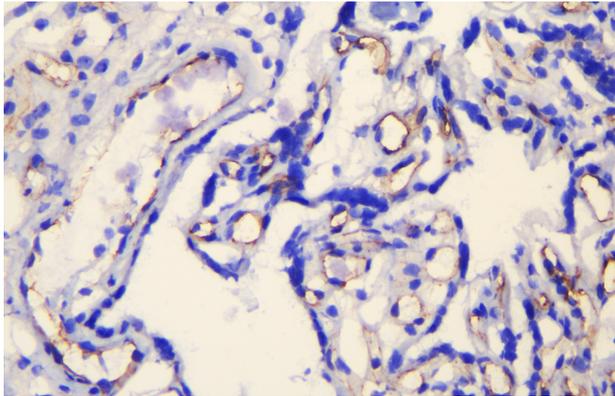
ARG40764 anti-VE Cadherin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human mammary cancer tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG40764 anti-VE Cadherin antibody at 1  $\mu\text{g}/\text{ml}$ , overnight at 4°C.



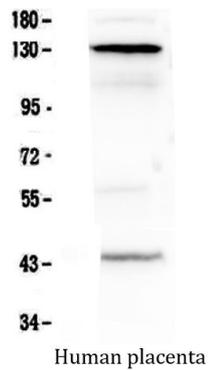
#### ARG40764 anti-VE Cadherin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human rectal cancer tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG40764 anti-VE Cadherin antibody at 1  $\mu\text{g}/\text{ml}$ , overnight at 4°C.



#### ARG40764 anti-VE Cadherin antibody IHC-Fr image

Immunohistochemistry: Frozen section of Human placenta tissue. The tissue section was blocked with 10% goat serum and then stained with ARG40764 anti-VE Cadherin antibody at 1  $\mu\text{g}/\text{ml}$  dilution, overnight at 4°C.



#### ARG40764 anti-VE Cadherin antibody WB image

Western blot: 50  $\mu\text{g}$  of sample under reducing conditions. Human placenta tissue lysate stained with ARG40764 anti-VE Cadherin antibody at 0.5  $\mu\text{g}/\text{ml}$ , overnight at 4°C.