SunLong Biotech Co.,LTD
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[Primary Antibody]

Rabbit Anti-CD144/VE Cadherin antibody

Catalog Number: SL22363R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	CD144/VE Cadherin
Immunogen:	KLH conjugated synthetic peptide derived from mouse CD144/VE Cadherin: 46-140/784 <Extracellular>
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	WB=1:500-2000 Flow-Cyt=1ug/Test not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Human
Predicted MW.:	86kDa
Subcellular Location:	The cell membrane
Background:	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]. **Function:** Cadherins are calcium dependent cell adhesion proteins. They preferentially interact with themselves in a homophilic manner in connecting

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	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. **Subunit:** Interacts via cadherin 5 domain with PTPRB. Interacts with TRPC4. Interacts with KRIT1. **Subcellular Location:** Cell junction. Cell membrane. Found at cell-cell boundaries and probably at cell-matrix boundaries. **Tissue Specificity:** Endothelial tissues and brain. **Post-translational modifications:** Phosphorylated on tyrosine residues by KDR/VEGFR-2. Dephosphorylated by PTPRB. **Similarity:** Contains 5 cadherin domains. **Database links:** **Entrez Gene:** 1003 Human **Entrez Gene:** 12562 Mouse **Entrez Gene:** 307618 Rat Omim: 601120 Human **SwissProt:** P33151 Human **SwissProt:** P55284 Mouse **Unigene:** 76206 Human **Unigene:** 21767 Mouse **Unigene:** 224644 Rat Vascularendothelial cell cadherin (VE-cadherin; VECD), also known as CD144, Cadherin-5, is the main adhesion molecule of AJ junctions (adherens junctions) and is an endothelial cells-specific cadherin essential for maintaining vascular endothelial cell polarity and integrity.

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[VALIDATION IMAGES]

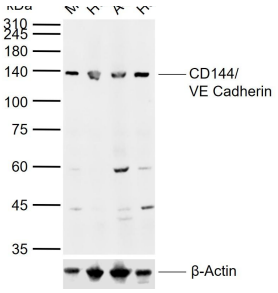


Figure 1. Sample: Lane 1: Human MCF-7 cell lysates Lane 2: Human HUVEC cell lysates Lane 3: Human A431 cell lysates Lane 4: Human HeLa cell lysates Primary: Anti-CD144/VE Cadherin (SL22363R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 86 kDa Observed band size: 135 kDa

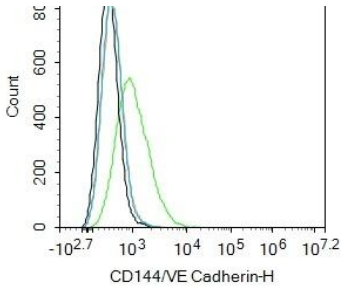


Figure 2. Blank control:HUVEC. Primary Antibody (green line): Rabbit Anti-CD144/VE Cadherin antibody (SL22363R) Dilution: 1ug/Test; Secondary Antibody (white blue line): Goat anti-rabbit IgG-BF488 Dilution: 0.5ug/Test. Isotype control (orange line) : Normal Rabbit IgG Protocol The cells were incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature.Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed

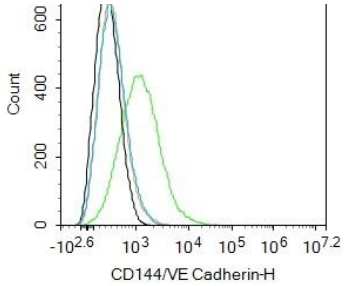


Figure 3. Blank control:HUVC. Primary Antibody (green line): Rabbit Anti-CD144/VE Cadherin antibody (SL22363R) Dilution: 1ug/Test; Secondary Antibody (white blue line): Goat anti-rabbit IgG-BF488 Dilution: 0.5ug/Test. Isotype control (orange line) : Normal Rabbit IgG Protocol The cells were incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature.Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed

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