

Datasheet for ABIN1105883

anti-Cadherin 5 antibody (Extracellular Domain)**2** Images[Go to Product page](#)

Overview

Quantity:	0.1 mg
Target:	Cadherin 5 (CDH5)
Binding Specificity:	Extracellular Domain
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Cadherin 5 antibody is un-conjugated
Application:	Western Blotting (WB), Immunoprecipitation (IP), Immunofluorescence (IF), Immunohistochemistry (Frozen Sections) (IHC (fro)), Functional Studies (Func), Enzyme Immunoassay (EIA)

Product Details

Clone:	BV9
Isotype:	IgG2a
Specificity:	The monoclonal antibody BV9 binds to the extracellular domain (EC3-EC4) of human VE-cadherin (vascular endothelial cadherin).
Cross-Reactivity (Details):	Species reactivity (tested):Human
Purification:	Protein G

Target Details

Target:	Cadherin 5 (CDH5)
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Target Details

Alternative Name:	CD144 / Cadherin-5 (CDH5 Products)
Background:	Endothelial cells control the passage of plasma constituents and circulating cells from blood to the underlying tissues. VE-cadherin is of vital importance for the maintenance and control of endothelial cell contacts. Mechanisms that regulate VE-cadherin-mediated adhesion are important for the control of vascular permeability and leukocyte extravasation. VE-cadherin regulates various cellular processes such as cell proliferation and apoptosis and modulates vascular endothelial growth factor receptor functions. Therefore, VE-cadherin is also essential during embryonic angiogenesis. The specialized function of VE-cadherin is lost or impaired in several pathological conditions - including inflammation, sepsis, ischemia and diabetes - which leads to severe, and sometimes fatal, organ dysfunction. Furthermore, abnormal increase in vascular permeability is often observed in pathological conditions, such as tumor-induced angiogenesis, macular degeneration, allergy, and brain stroke. Endothelial permeability is regulated in part by the dynamic opening and closure of cell-cell adherent junctions. In vascular endothelium, adherent junctions are mainly composed of VE-cadherin, an adhesive receptor that is able to self-associate at endothelial cell-cell contacts. VE-cadherin links endothelial cells together by homophilic interactions mediated by its extracellular part and associates intracellularly with the actin cytoskeleton via catenins. VE-cadherin belongs to the cadherin super-family of cell-cell adhesion molecules, which are encoded by more than 200 genes in the human genome. Classical cadherins are Ca²⁺-dependent, homophilic, cell to cell adhesion molecules expressed in nearly all cells within solid tissues. Cadherins form a core adhesion complex that consists of a cadherin dimer, binding through its extracellular region to another dimer of cadherins expressed in adjacent cells, while its intracellular region is anchored to the plasma membrane and linked to the cytoskeleton. The VE-cadherin extracellular domain consists of five cadherin-type repeats, called EC (extracellular cadherin) domains that are bound together by calcium ions in a rod-like structure. Synonyms: 7B4 antigen, CDH5, VE-Cadherin, Vascular endothelial cadherin
Gene ID:	1003
NCBI Accession:	NP_001786
UniProt:	P33151
Pathways:	Cell-Cell Junction Organization, Signaling Events mediated by VEGFR1 and VEGFR2

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
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Application Details

Restrictions: For Research Use only

Handling

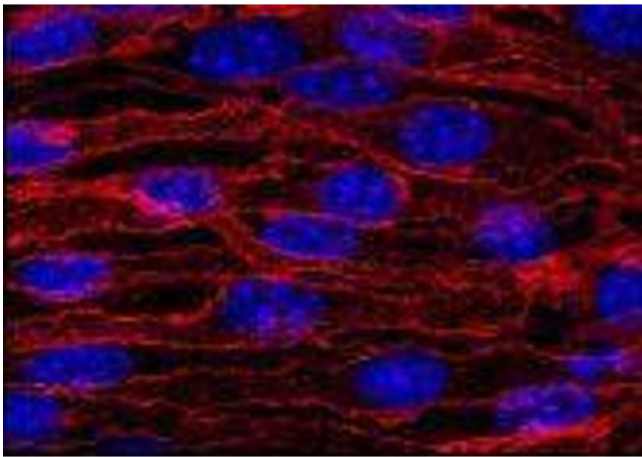
Concentration: 0.1 mg/mL

Buffer: PBS, 0.1 % bovine serum albumin

Storage: 4 °C

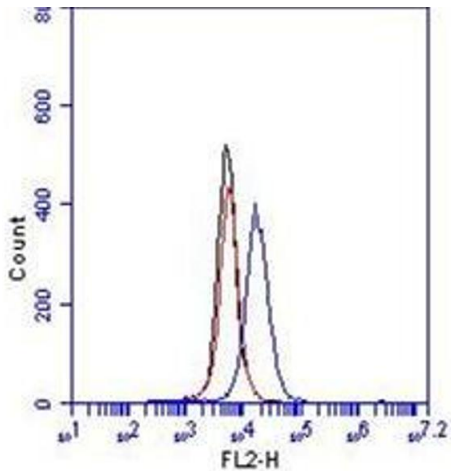
Storage Comment: Store at 2 - 8 °C.

Images



Immunofluorescence

Image 1.



Flow Cytometry

Image 2.