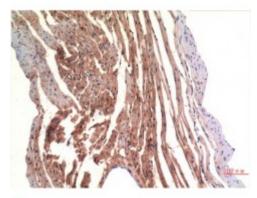


Anti-VE-Cadherin antibody





Description Mouse monoclonal to VE-Cadherin.

Model STJ97779

Host Mouse

Reactivity Human, Mouse, Rat

Applications IHC

Immunogen synthetic peptide derived from VE-Cadherin

Immunogen Region 670-750 aa

Gene ID <u>1003</u>

Gene Symbol CDH5

Dilution range IHC 1:100-200

Specificity VE-Cadherin Mouse Monoclonal Antibody (8E5) detects endogenous levels

of CDH5

Tissue Specificity Endothelial tissues and brain.

Purification The antibody was affinity-purified from mouse ascites by affinity-

chromatography using specific immunogen.

Clone ID 800000

Note For Research Use Only (RUO).

Protein Name Cadherin-5 7B4 antigen Vascular endothelial cadherin VE-cadherin CD

antigen CD144

Clonality Monoclonal

Conjugation Unconjugated

Isotype IgG1

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:1764OMIM:601120</u>

Alternative Names Cadherin-5 7B4 antigen Vascular endothelial cadherin VE-cadherin CD

antigen CD144

Function 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.

Sequence and Domain Family Three calcium ions are usually bound at the interface of each cadherin domain

and rigidify the connections, imparting a strong curvature to the full-length

ectodomain.

Cellular Localization Cell junction Cell membrane. Found at cell-cell boundaries and probably at

cell-matrix boundaries. KRIT1 and CDH5 reciprocally regulate their

localization to endothelial cell-cell junctions.

Post-translational Phosphorylated on tyrosine residues by KDR/VEGFR-2. Dephosphorylated

Modifications by PTPRB . O-glycosylated.

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