Recombinant Protein Technical Manual

Recombinant Human VE-Cadherin/CDH5 Protein (His & Fc Tag)(Active)

RPES3256

Product Data:

Product SKU: RPES3256

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_001786.2

Protein Information:

Molecular Mass:	92 kDa
AP Molecular Mass:	120 kDa
Tag:	C-His & Fc
Bio-activity:	Measured by the ability of the immobilized protein to support the adhesion of MCF-7 human breast adenocarcinoma cells. When 5 x 10E4 cells/well are added to Recombinant Human Cadherin-5 coated plates (0.8 µg/mL with 100 µL/well), approximately >50% will adhere after 1 hour at 37°C.
Purity:	> 85 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per µg as determined by the LAL method.
Storage:	Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from sterile PBS, pH 7.4
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	7B4;CD144

Immunogen Information:

Sequence: Met 1-Gln 593

Background:

Cadherins (Calcium dependent adhesion molecules) are a class of transmembrane proteins. Cadherin-5, also known as VE-cadherin, CDH5 and CD144, an endothelial specific cell-cell adhesion molecule, plays a pivotal role in the formation, maturation and remodeling of the vascular wall. VE-Cadherin is widely considered to be specific for vascular endothelia in which it is either the sole or the predominant cadherin, often co-existing with N-cadherin. This specificity of VE-cadherin for vascular endothelial cells is important not only in blood and lymph vessel biology and medicine, but also for cell-type-based diagnoses, notably those of metastatic tumors. As a classical cadherin, VE-Cadherin links endothelial cells together by homophilic interactions mediated by its extracellular part and associates intracellularly with the actin cytoskeleton via catenins. Mechanisms that regulate VE-cadherin-mediated adhesion are important for the control of vascular permeability and leukocyte extravasation. In addition to its adhesive functions, VE-Cadherin regulates various cellular processes such as cell proliferation and apoptosis and modulates vascular endothelial growth factor receptor functions. Consequently, VE-cadherin is essential during embryonic angiogenesis.