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

Catalog Number: PKSH031610

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

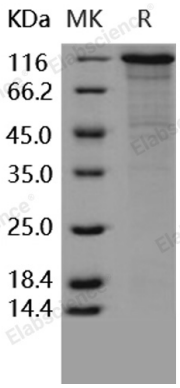
Description

Species	Human
Source	HEK293 Cells-derived Human VE-Cadherin/CDH5 protein Met 1-Gln 593, with an C-terminal His & Fc
Calculated MW	92.0 kDa
Observed MW	120 kDa
Accession	NP_001786.2
Bio-activity	Measured by the ability of the immobilized protein to support the adhesion of MCF-7 human breast adenocarcinoma cells. When 5 x 10^4 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.

Properties

Purity	> 85 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, 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 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 85 % as determined by reducing SDS-PAGE.

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.

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