Mouse VE-Cadherin / CD144 / CDH5 Protein (His Tag)

Catalog Number: 50192-M08H

General Information

Gene Name Synonym:
7B4; AA408225; Cd144; VE-Cad; Vec; VEcad; VECD

Protein Construction:
A DNA sequence encoding the mouse CDH5 (NP_033998.2) extracellular domain (Met 1-Ala 592) was fused with a polyhistidine tag at the C-terminus.

Source: Mouse
Expression Host: HEK293 Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Endotoxin:
< 1.0 EU per μg of the protein as determined by the LAL method

Stability:
Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Gly 25 & Asp 46

Molecular Mass:
The recombinant mouse CDH5 comprises 559 (mature form) or 580 (pro form) amino acids and has a predicted molecular mass of 63.5 (or 66) kDa. As a result of glycosylation, the apparent molecular mass of rmCDH5 is approximately 75-85 kDa in SDS-PAGE under reducing conditions.

Formulation:
Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:
Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:

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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.

References