

Human Tie2 / CD202b / TEK Protein (His Tag)

Catalog Number: 10700-H08H



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

CD202B; TIE-2; TIE2; VMCM; VMCM1

Protein Construction:

A DNA sequence encoding the extracellular domain (Met 1-Lys 745) of human Tie2 (NP_000450.2) precursor was fused with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio Activity:

Measured by its binding ability in a functional ELISA. Immobilized recombinant human Tie2 at 2 µg/ml (100 µl/well) can bind human Angiopoietin-2 at a linear range of 1.28-160 ng/ml.

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: Ala 23

Molecular Mass:

The recombinant human Tie2 comprises 734 amino acids and predicts a molecular mass of 82 kDa. As a result of glycosylation, the apparent molecular mass of rhTie2 is approximately 95-105 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:

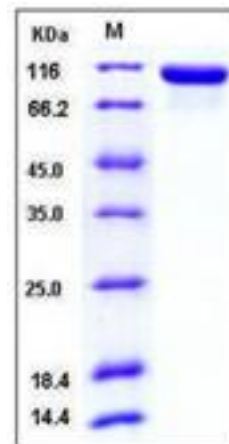
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

TEK, or TIE-2, is an endothelial cell-specific receptor tyrosine kinase (RTK) that is known as a functioning molecule of vascular endothelial cells. TEK comprises a subfamily of RTK with TIE, and these two receptors play critical roles in vascular maturation, maintenance of integrity and remodeling. Targeted mutagenesis of both Tek and its agonistic ligand, Angiopoietin-1, result in embryonic lethality, demonstrating that the signal transduction pathways mediated by this receptor are crucial for normal embryonic development. TEK signaling is indispensable for the development of the embryonic vasculature and suggests that TEK signaling may also be required for the development of the tumor vasculature.

References

1.Jones N, *et al.* (1998) The Tek / Tie2 receptor signals through a novel Dok-related docking protein, Dok-R. *Oncogene*. 17(9): 1097-108. 2.Sato A, *et al.* (1998) Characterization of TEK receptor tyrosine kinase and its ligands, Angiopoietins, in human hematopoietic progenitor cells. *Int Immunol*. 10(8): 1217-27. 3.Huang L, *et al.* (1995) GRB2 and SH-PTP2: potentially important endothelial signaling molecules downstream of the TEK / TIE2 receptor tyrosine kinase. *Oncogene*. 11(10): 2097-103.

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For US Customer: Fax: 267-657-0217 • Tel: 215-583-7898

Global Customer: Fax :+86-10-5862-8288 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>