## Recombinant Human Tie-2 (C-Fc)

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

Catalog Number: PKSH033870



Description Species Human Mol Mass 107.4 kDa Accession NP 000450.2 Not validated for activity **Bio-activity Properties** > 95 % as determined by reducing SDS-PAGE. Purity < 1.0 EU per µg of the protein as determined by the LAL method. Endotoxin Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 Storage °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at  $< -20^{\circ}$ C for 3 months. This product is provided as lyophilized powder which is shipped with ice packs. Shipping Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Formulation 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. Please refer to the printed manual for detailed information. Reconstitution Data

KDa MK R 170 130 95 72 55

> 95 % as determined by reducing SDS-PAGE.

43

34

## Background

Tie-1/Tie (tyrosine kinase with Ig and EGF homology domains 1) and Tie-2/Tek comprise a receptor tyrosine kinase (RT K) subfamily with unique structural characteristics: two immunoglobulin-like domains flanking three epidermal growth factor (EGF)-like domains and followed by three fibronectin type III-like repeats in the extracellular region and a split tyrosine kinase domain in the cytoplasmic region. These receptors are expressed primarily on endothelial and hematopoietic progenitor cells and play critical roles in angiogenesis, vasculogenesis and hematopoiesis. Human Tie-2 cDNA encodes a 1124 amino acid (aa) residue precursor protein with an 18 residue putative signal peptide, a 727 residue extracellular domain and a 354 residue cytoplasmic domain. Two ligands, angiopoietin-1 (Ang-1) and angiopoietin-2 (Ang-2), which bind Tie-2 with high-affinity have been identified. Ang-2 has been reported to act as an antagonist for Ang-1. Mice engineered to overexpress Ang-2 or to lack Ang-1 or Tie-2 display similar angiogenesis defects.

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