A Reliable Research Partner in Life Science and Medicine

# Recombinant Human Tie-2 (C-Fc)

Catalog Number: PKSH033870

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

### **Description**

Species Human

Source HEK293 Cells-derived Human Tie-2 protein Ala23-Lys745, with an C-terminal Fc

 Mol\_Mass
 107.4 kDa

 Accession
 NP 000450.2

**Bio-activity** Not validated for activity

## **Properties**

**Purity** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin**  $< 1.0 \text{ EU per } \mu\text{g}$  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 a 0.2 µm filtered solution of PBS, pH 7.4.

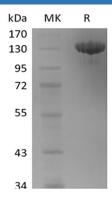
Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants

before lyophilization.

Please refer to the specific buffer information in the printed manual.

**Reconstitution** Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

## 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.

#### For Research Use Only

Fax: 1-832-243-6017