Recombinant Human TIE1, Fc-tagged

Cat. No. TIE1-74H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human Soluble TIE-1 fused with the Fc part of human IgG1 produced in baculovirus is a monomeric, glycosylated, polypeptide containing 749 amino acids and having a total molecular mass of 250 kDa. Human TIE-1/Fc monomer has a calculated molecular mass of approximately 105 kDa. As a result of glycosylation, the recombinant protein migrates as an approximately 125 kDa protein in SDS-PAGE under reducing conditions. The TIE1 Fc Chimera is purified by proprietary chromatographic techniques.
Species	Human
Source	Insect Cells
Description	TIE-1 (tyrosine kinase with Ig and EGF homology domains 1) and TIE-2/Tek comprise a receptor tyrosine kinase (RTK) 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-1 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. Whereas two ligands have been described for TIE-2 [angiopoietin-1 (Ang1) and angiopoietin-2 (Ang2)], so far no ligand was found for TIE-1.

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Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	Greater than 90.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Formulation	TIE-1 Fc Chimera was lyophilized from a concentrated (1 mg/ml) sterile solution containing 1x PBS.
Solubility	It is recommended to reconstitute the lyophilized TIE-1 Fc Chimera in sterile water not less than 100μg/ml, which can then be further diluted to other aqueous solutions.
Storage	Lyophilized sTIE-1 although stable at room temperature for 3 weeks, should be stored desiccated below -18℃. Upon reconstitution TIE-1 should be stored at 4℃between 2-7 days and for future use below -18℃. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

GENE INFORMATION

Gene Name	TIE1 tyrosine kinase with immunoglobulin-like and EGF-like domains 1 [Homo sapiens]
Synonyms	TIE1; tyrosine kinase with immunoglobulin-like and EGF-like domains 1; soluble TIE1 variant 1; soluble TIE1 variant 2; soluble TIE1 variant 3; soluble TIE1 variant 4; soluble TIE1 variant 5; receptor tyrosine kinase; tyrosine kinase with immunoglobulin and epidermal growth factor homology domains 1; EC 2.7.10.1; JTK14; TIE; Tyrosine-protein kinase receptor Tie-1; OTTHUMP00000008352
Gene ID	7075
mRNA Refseq	NM_005424
Protein Refseq	NP_005415

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MIM	600222
UniProt ID	P35590
Chromosome Location	1p34-p33
Function	ATP binding; nucleotide binding; protein binding; receptor activity; transferase activity; transmembrane receptor protein tyrosine kinase activity

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