

Human TIE-2/Fc Chimera, Soluble

ORDERING INFORMATION

Catalog Number:	SFC-013
Size:	20ug (Range 10-100 ng/ml)
Source:	Insect Cell
Purity:	> 90%
Endotoxin level:	< 0.1 ng per ug of sTIE-2/Fc
Stabilizer:	None
Buffer:	PBS pH 7.4 w/o preservative
Formulation:	Lyophilized

Description:

Recombinant human soluble TIE-2/Tek was fused with the Fc part of human IgG1. The recombinant mature sTIE-2/Fc is a disulfide-linked homodimeric protein. The sTIE-2/Fc monomers have a mass of approximately 125 kDa. The soluble receptor protein consists of the full extracellular domain (Met1-Val730). 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-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 (Ang1) and angiopoietin-2 (Ang2), which bind TIE-2 with high-affinity have been identified. Ang2 has been reported to act as an antagonist for Ang1. Mice engineered to overexpress Ang2 or to lack Ang1 or TIE-2 display similar angiogenic defects. The recombinant mature TIE-2-Fc is a disulfide-linked homodimeric protein. Human TIE-2-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.

Reconstitution:

The lyophilized sTIE-2/Fc is soluble in water and most aqueous buffers and should be reconstituted in PBS or medium to a concentration not lower than 50µg/ml.

Stability:

Lyophilized samples are stable for greater than six months at -20 °C to -70 °C. Reconstituted sTIE-2/Fc should be stored in working aliquots at -20 °C. **Avoid repeated freeze-thaw cycles!**

Optimal dilutions should be determined by each laboratory for each application.

The listed dilutions are for recommendation only and the final conditions should be optimized by the ender users!

This product is sold for Research Use Only !