

## 32-3122: TIE-2 Fc Recombinant Protein

**Alternative Name** Angiopoietin-1 receptor precursor, Tyrosine-protein kinase receptor TIE-2, hTIE2, Tyrosine-protein kinase receptor TEK, p140 TEK, Tunica interna endothelial cell kinase, CD202b, VMCM, VMCM1, TIE2.

### Description

Source : Insect Cells. Soluble TEK Human Recombinant fused with the Fc part of human IgG1 produced in baculovirus is a monomeric, glycosylated, polypeptide containing 730 amino acids and having a total molecular mass of 250 kDa. Human TIE-2/Fc monomer has a calculated molecular mass of approximately 125 kDa. As a result of glycosylation, the recombinant protein migrates as an approximately 140 kDa protein in SDS-PAGE under reducing conditions. The TEK Fc Chimera is purified by proprietary chromatographic techniques. 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 1122 amino acid (aa) residue precursor protein with an 18 residue putative signal peptide, a 726 residue extracellular domain and a 353 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-1 display similar angiogenic defects.

### Product Info

**Amount :** 10 µg  
**Purification :** Greater than 90.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.  
**Content :** TEK Fc Chimera was lyophilized from a concentrated (1 mg/ml) sterile solution containing 1x PBS.  
**Storage condition :** Lyophilized sTIE-2 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution TEK should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

### Application Note

It is recommended to reconstitute the lyophilized TIE-2 Fc Chimera in sterile water not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

