

## TIE1

### Recombinant Human TIE-1 / Fc Chimera, soluble

Catalog No.	CRT800A	Quantity:	20 µg
	CRT800B		100 µg
	CRT800C		1.0 mg

**Alternate Names:** Tyrosine-protein kinase receptor Tie-1, JTK14

**Description:** Recombinant human soluble TIE-1 was fused with the Fc part of human IgG<sub>1</sub>. The soluble receptor protein consists of the full extracellular domain (Met1-Glu749). The recombinant mature TIE-1/Fc is a disulfide-linked homodimeric protein. 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 haematopoietic 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.

**UniProt ID:** P35590

**Gene ID:** 7075

**Source:** Insect cells

**Molecular Weight:** 105 kDa predicted, monomer, under reducing conditions  
125 kDa apparent, due to glycosylation

**Formulation:** Lyophilized from PBS.

**Purity:** > 90%, by SDS-PAGE and visualized by silver stain

**Endotoxin Level:** < 1 EU/µg

**Biological Activity:** Since a ligand for TIE-1 has not yet been identified, the recombinant protein was not tested for biological activity.

**Reconstitution:** **Centrifuge vial prior to opening.** Add sterile water to the vial to a concentration of 0.1 - 1.0 mg/mL. **Do not vortex.** After complete solubilization of the protein, it may be further diluted with other solutions containing a carrier protein such as 0.1 % BSA.

**Storage & Stability:** The lyophilized protein is stable at -20°C to -80° for up to 1 year. Reconstituted working aliquots are stable for 1 week at 2-8°C and for 3 months at -20°C to -80°C.  
**Avoid repeated freeze/thaw cycles.**



**Amino Acid Sequence:** VDLTLLANLRLTDPQRFFLTCVSGEAGAGRGSDAWGPPLLEKDDRIVRTPPGPPLRLA  
RNGSHQVTLRGFSKPSDLVGVFSCVGGAGARRTRVIYVHNSPGAHLLPDKVTHTVNKG  
DTAVLSARVHKEKQTDVIWKSNGSYFYTLDWHEAQDGRFLLQLPNVQPPSSGIYSATYL  
EASPLGSAFFRLIVRGCAGRWGPGCTKECPGCLHGGVCHDHGECVCPGFTGTRC  
EQACREGRFGQSCQECPGISGCRGLTFCLPDPYGCSCGSGWRGSQCQEACAPGHF  
GADCRLQCQCQNGGTCDRFSGVCVPSGWHGVHCEKSDRIPQILNMASELEFNLETMP  
RINCAAAGNPPFVVRGSIELRKPDTVLLSTKAIVEPEKTTAEFEVPRLLVLADSGFWEQCRV  
STSGGQDSRRFKVNVKVPVPLAAPRLTKQSRQLVVSPLVSFSGDGPSTVRLHYRPQ  
DSTMDWSTIVVDPSENVTLMNLRPKTGYSVRVQLSRPGEEGEGAWGPPTLMTTDCPE  
PLLQPWLEGWHVEGTDRLRVSWSLPLVPGPLVGDGFLRLWDGTRGQERRENVSSP  
QARTALLTGLTPGTHYQLDVQLYHCTLLGPASPPAHVLLPPSGPPAPRHLHAQALSDSE  
IQLTWKHPEALPGPIKYYVEVQVAGGAGDPLWIDVDRPEETSTIIRGLNASTRYLFRMR  
ASIQGLGDWSNTVEESTLGNGLQAEGPVQETRSDKHTCPCPAPELLGGPSVFLFPP  
KPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVV  
SVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQ  
VSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPMLDSDGSFFLYSKLTVDKSRWQQG  
NVFSCSVMHREALHNHYTQKSLSLSPGK

**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**



**Cell Sciences®**  
65 Parker Street  
Unit 11  
Newburyport, MA 01950

Toll Free: 888-769-1246  
Phone: 978-572-1070  
Fax: 978-992-0298

E-mail: [info@cellsciences.com](mailto:info@cellsciences.com)  
Website: [www.cellsciences.com](http://www.cellsciences.com)