

## Recombinant Murine sTIE-2/Fc Chimera

**Description:** Recombinant murine soluble TIE-2 was fused with the Fc part of human IgG<sub>1</sub>. The recombinant mature sTIE-2/Fc is a disulfide-linked homodimeric protein. The sTIE-2/Fc monomers have a mass of approximately 105 kDa. As a result of glycosylation, the recombinant protein migrates as an approximately 140 kDa protein in SDS-PAGE under reducing conditions. The soluble receptor protein consists of the full extracellular domain (Val19-Leu740).

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.

<b>Source:</b>	CHO cells
<b>Molecular Weight:</b>	280 kDa
<b>Subunit:</b>	glycosylated dimer
<b>Purity:</b>	> 90%, by SDS-PAGE and visualised by silver stain
<b>Endotoxin level:</b>	< 0.1 ng per ? g sTIE-1/Fc
<b>Stabilizer:</b>	none
<b>Buffer:</b>	PBS
<b>Formulation:</b>	lyophilized

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

**Stability:** Samples are stable for 2-4 weeks at +4°C. sTIE-1/Fc should be stored in working aliquots at -20°C to -80°C. **Avoid repeated freeze-thaw cycles!**

**Usage:** sTIE-1/Fc is offered for research use. Not for drug use. **Not for human use!**

<b>Catalogue number:</b> SFC-034	<b>Size:</b> 100 µg
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Literature: [Sato et al., PNAS 90:9355, 1993; Gale et al., Gen Dev 13:1055, 1999]