Recombinant Mouse Tek, Fc-tagged

Cat. No. Tek-89M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse Soluble TIE-2 fused with the Fc part of human IgG1 produced in*CHO*is a monomeric, glycosylated, polypeptide containing 740 amino acids and having a total molecular mass of 260 kDa. Mouse 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 140 kDa protein in SDS-PAGE under reducing conditions. The TIE2 Fc Chimera is purified by proprietary chromatographic techniques.
Species	Mouse
Source	CHO
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 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

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	display similar angiogenic defects.
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-2 Fc Chimera was lyophilized from a concentrated (1 mg/ml) sterile solution containing 1x PBS.
Solubility	It is recommended to reconstitute the lyophilized TIE-2 Fc Chimera in sterile water not less than 100μg/ml, which can then be further diluted to other aqueous solutions.
Storage	Lyophilized sTIE-2 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution TIE-2 should be stored at 4°Cbetween 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.

GENE INFORMATION

Gene Name	Tek endothelial-specific receptor tyrosine kinase [Mus musculus]
Synonyms	Tek; endothelial-specific receptor tyrosine kinase; Hyk; Tie2; tie-2; Cd202b; AA517024
Gene ID	21687
mRNA Refseq	NM_013690
Protein Refseq	NP_038718

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

UniProt ID	Q02858
Chromosome Location	4 43.6 cM
Function	ATP binding; kinase activity; nucleotide binding; protein kinase activity; protein tyrosine kinase activity; receptor activity; transferase activity; transmembrane receptor protein tyrosine kinase activity

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA