



Recombinant Mouse soluble TIE-1-His Receptor



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no:	S01-M41
Size:	10 µg
Lot. No.:	According to product label
Country of origin:	Germany

Scientific Background

Gene:	<i>tie1</i>
Synonyms:	Tyrosine-protein kinase Tie-1

Recombinant mouse soluble TIE-1 was fused with a 6x His-tag at the C-terminus. The soluble receptor protein consists of the full extracellular domain (Ser22-Ala748). Mouse sTIE-1 monomer has a calculated molecular mass of approximately 79,8 kDa. As a result of glycosylation, the recombinant protein migrates as an approximately 95 kDa protein in SDS-PAGE under reducing conditions. 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.

References

1. Partanen J and DJ Dumont (1999) Curr Top Microbiol Immunol 237:159.
2. Takakura N et al, (1998) Immunity 9:677.
3. Procopio W et al, (1999) J Biol Chem 274:30196.
4. Sato et al., PNAS 90:9355, 1993
5. Gale et al., Gen Dev 13:1055, 1999

Sequence

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SVDLTLLANLRI TDPQRFFLTCSGEAGAGRSSDPPLLEKDDRIVRTFPFG  
QPLYLARNGSHQVTLRGFSKPSDLVGVFSCVGGAGARRTRVLYVHNSPGAHL  
FPDKVTHTVNKGDTAVLSAHVHKEKQTDVWKNNGSYFNTLDWQEADDGRFQ  
LQLQNVQPPSSGIYSATYLEASPLGSAFFRLIVRGCAGRWGPGCVKDCPGC  
LHGGVCHDHDGECVCPGFTGTTRCEQACREGRFGQSCQECPGTAGCRGLTF  
CLPDPYGCSCGSGWRGSCQCEACAPDHFADCR LQCQCQNGGTCDRFSGCVC  
PSGWHGVHCEKSDRI PQILSMATEVEFNIGTMPRINCAAAGNPFVVRGSMKL  
RKP DGTMLLSTKVI VEPDR TAEFEVPSLTLGDSGFWECEVSTSGGQDSRRF  
KVNKVPVPLTAPRLLAKQSRQLVVSPLVSFSGDGPISVRLHYRPQDSTI  
AWSAI VVDPSENVTLMLNPKPTGYNVRVQLSRPGE GEGGWGSPALMTDCP  
EPLLQPWLESWHVEGPDRLRVSWSLPSVPLSGDGFLLRLWDGARGQERRENI  
SFPQARTALLTGLTPGTHYQLDVRLYHCTLLGPASPPAHVHLPPSGPPAPRH  
LHAQALS DSEIQLMWQHPEAPSGPISKYI VEIQVAGSGDPQWMDVDRPEET  
SIVRGLNASTRYLFRVRASVQGLGDWSNTVEEATLGNLQSEDPVRESRAT  
RHHHHHH
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Database References

Protein RefSeq:	NP_03517.2
Uniprot ID:	Q06806
mRNA RefSeq:	NM_011587.2

Product Specifications

Expressed in	Insect cells
Purity	> 95% by SDS-PAGE & silver stain
Buffer	PBS
Stabilizer	None
Formulation	lyophilized
Length (aa):	735
MW:	95 kDa
Result by N-terminal sequencing	SVDLTLLANL

Stability: Lyophilized samples are stable for greater than six months at -20°C to -70°C. Reconstituted sTIE-1-His should be stored in working aliquots at -20°C.

Reconstitution: The lyophilized sTIE-1-His is soluble in water and most aqueous buffers and should be reconstituted in PBS to a concentration not lower than 50µg/ml.



AVOID REPEATED FREEZE AND THAW CYCLES!

Biological Activity: Bioassay data are not available.



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Handling/Application

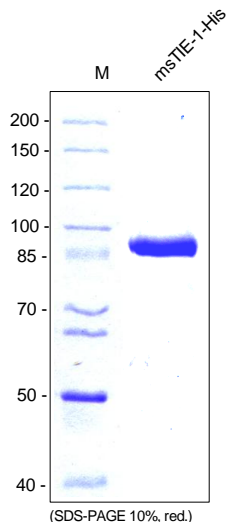


Fig. 1: SDS-PAGE analysis of recombinant mouse soluble TIE-1-His produced in insect cells. Sample was loaded in 10% SDS-polyacrylamide gel under reducing condition and stained with Coomassie blue.