



Recombinant Mouse soluble TIE-2-His Receptor



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no:	S01-M44
Size:	50 µg
Lot. No.:	According to product label
Country of origin:	Germany

Scientific Background

Gene:	<i>tek</i>
Synonyms:	Endothelial tyrosine kinase, Tyrosine kinase with Ig and EGF homology domains-2, CD202b

Recombinant mouse soluble TIE-2 was fused with a 6x His-tag at the C-terminus. The soluble receptor protein consists of the full extracellular domain (Ala23-Ala737). Mouse sTIE-2 monomer has a calculated molecular mass of approximately 79,86 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

- Partanen J and DJ Dumont (1999) Curr Top Microbiol Immunol 237:159.
- Takakura N et al, (1998) Immunity 9:677.
- Procopio W et al, (1999) J Biol Chem 274:30196.

Sequence

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AMDLILINSLPLVSDAETLTCIASGWHPEPTITIGRDFEALMNQHQPDPLEVT
QDVTREWAKKVVWKREKASKINGAYCEGRVRRGQAIRIRTMKMRQQASFLPAT
LTMTVDGRDGNVNISFKKVLIKEEDAVIYKNGSIHSVPRHEVPDILEVHLP
HAPHA
QPQDAGVYSARYIGGNLFTSAFTRLIVRRCEAQKWGPDRCPTTCKNNGVCH
EDTGECICPPGFMGRTEKACEPHTFGRTEKERCSCGPEGCKSYVFCPPDYGC
SCATGWRGLQCNEACPSGYGPDCKLRCHCTNEIICDRFQGCSCSQQWQGLQ
CKEGRPRMTPQIEDLPDHI EVNSGKFNPICKASGWPLPTSEEMTLVKPDGTV
LQPNDFNYDRFSVAIFTVNRVLPDPSGVWVCSVNTVAGMVEKPFNISVKVLP
EPLHAPNVIDTGHNFIIINISSEPYFGDGPISKKLFYKPNQAWKYIEVTNE
IFTLNLYLEPRDYELCVQLARPEGGEGHPGPVRRFTTASIGLPPRGLSLLP
KSQTALNLTWQPIFTNSEDEFYVEVERRSQTTSDQQNIKVPGNLTSVLLSNL
VPREQYTVRARVNTKAQGEWSEELRAWLSDILPPQENIKISNITDSTAMVS
WTIVDGYSSISSIIIRYKVVQGNEDQHDIVKIKNATVTQYQLKGEPEPTYHVD
IFAENNISSNPAPFSHELRLTLPSPASATRRHHHHHH
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Database References

Protein RefSeq:	NP_038718
Uniprot ID:	Q02858
mRNA RefSeq:	NM_013690

Product Specifications

Expressed in	Insect cells
Purity	> 95% by SDS-PAGE & silver stain
Buffer	PBS
Stabilizer	None
Formulation	lyophilized
Length (aa):	712
MW:	90 kDa
Result by N-terminal sequencing	AMDLILINSL

Stability: Lyophilized samples are stable for greater than six months at -20°C to -70°C. Reconstituted sTIE-2-His should be stored in working aliquots at -20°C.

Reconstitution: The lyophilized sTIE-2-His is soluble in water and most aqueous buffers and should be reconstituted in PBS or medium to a concentration not lower than 50µg/ml.



AVOID REPEATED FREEZE AND THAW CYCLES!

Biological Activity: Not tested so far!



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Handling/Application

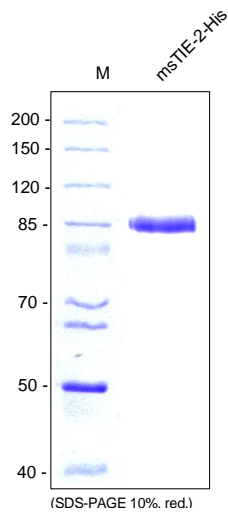


Fig. 1: SDS-PAGE analysis of recombinant mouse soluble TIE-2-His produced from insect cells. Sample was loaded in 10% SDS-polyacrylamide gel under reducing condition and stained with Coomassie blue.