

TIE-2, soluble Active Protein | TIE-2 active protein

Human TIE-2, soluble

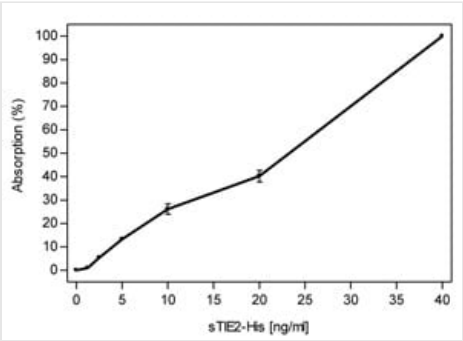
CATALOG # AAA79167	HOST Insect Cells	REACTIVITY Human
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PRODUCT SYNONYMS

TIE-2; soluble; Human TIE-2; Recombinant Human soluble TIE-2-His Receptor; Endothelial tyrosine kinase; Tyrosine kinase with Ig and EGF homology domains-2; TIE-2 active protein

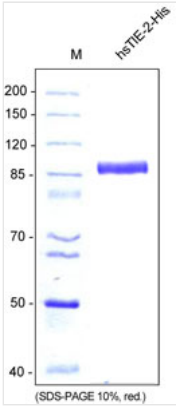
PRODUCT SPECIFICATIONS

Host	Insect Cells
Reactivity	Human
Purity/Purification	> 95% by SDS-PAGE & silver stain
Form/Format	Lyophilized
Sequence	AMDILINSL PLVSDAETSL TCIASGWRPH EPITIGRDFE ALMNQHDPL EVTQDVTREW AKKVWVKREK ASKINGAYFC EGRVRGEAIR IRTMKMRQQA SFLPATLTMT VDKGDNVNIS FKKVLIKEED AVIYKNGSFI HSVPRHEVPD ILEVHLPAAQ PQDAGVYSAR YIGGNLFTSA FTRLIVRRCE AQKWGPECNH LCTACMNNGV CHEDTGECIC PPGFMGRTCE KACELHTFGR TCKERCSGQE GCKSYVFCLP DPYGCSCATG WKGLQCNEAC HPGFYGPDCK LRCSCNNGEM CDRFQGCLCS PGWQGLQCER EGIPRMTPKI VDLPDHIEVN SGKFN PICKA SGWPLPTNEE MTLVKPDGT V LHPKDFNHTD HFSVAIFTIH RILPPDSGVW VCSVNTVAGM VEKPFNISVK VLPKPLNAPN VIDTGHNF AV INISSEPYFG DGPIKSKLL YKPVNHYEAW QHIQVTNEIV TLNYLEPRTE YELCVQLVRR GEGGEGHPGP VRRFTTASIG LPPPRGLNLL PKSQTTLNLT WQPIFPSSD DFYVEVERRS VQKSDQQNIK VPGNLTSVLL>NNLHPREQYV VRARVNTKAQ GEWSEDLTAW T L S D I L P P Q P E N I K I S N I T H S S A V I S W T I L D G Y S I S S I T I R Y K V Q G K N E D Q H V D V K I K N A T I I Q Y Q L K G L E P E T A Y Q V D I F A E N N I G S S N P A F S H E L V T L P E S Q A P A D L G G G K T R H H H H H H
Sequence Length	731
N Terminal Sequence	AMDILINSL
Country of origin	Germany
Stabilizer	None
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 50ug/ml.
Buffer	PBS
Biological Activity	The activity was tested by a functional ELISA assay where recombinant human Ang-2 was used for capturing sTIE-2.
Preparation and Storage	Lyophilized samples are stable for greater than six months at -20 degree C to -70 degree C. Reconstituted sTIE-2-His should be stored in working aliquots at -20 degree C. AVOID REPEATED FREEZE AND THAW CYCLES!



Application Data

Functional ELISA to test the binding of sTIE-2 to its ligand Ang-2. Ang-2 was coated on the plate and increasing amounts of recombinant human soluble sTIE-2 was added.



SDS-PAGE

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

ADDITIONAL INFORMATION

Related Product Information for TIE-2 active protein	Recombinant human soluble TIE-2/TEK was fused with a 6x His-tag at the C-terminus. The soluble receptor protein consists of the full extracellular domain (Thr19-Lys745). 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-2 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. 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-2 display similar angiogenic defects.
Product Categories/Family for TIE-2 active protein	Soluble receptors
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.

NCBI AND UNIPROT INFORMATION

NCBI GI #	88758596
NCBI GeneID	7010
NCBI Accession #	NP_000450.2
NCBI GenBank Nucleotide #	NM_000459.3
UniProt Accession #	Q02763; Q5TCU2; Q8IV34; A8K6W0; B4DH20; B4DHD3; D3DRK5; E7EWI2
Molecular Weight	95 kDa
NCBI Official Full Name	angiopoietin-1 receptor
NCBI Official Synonym Full Names	TEK tyrosine kinase, endothelial
NCBI Official Symbol	TEK
NCBI Official Synonym Symbols	TIE2; VMCM; TIE-2; VMCM1; CD202B

NCBI Protein Information	angiopoietin-1 receptor; hTIE2; p140 TEK; soluble TIE2 variant 1; soluble TIE2 variant 2; endothelial tyrosine kinase; tyrosine-protein kinase receptor TEK; tunica interna endothelial cell kinase; tyrosine-protein kinase receptor TIE-2; tyrosine kinase with Ig and EGF homology domains-2
UniProt Protein Name	Angiopoietin-1 receptor
UniProt Gene Name	TEK
UniProt Synonym Gene Names	TIE2; VMCM; VMCM1; hTIE2
UniProt Entry Name	TIE2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/insect-human-active-protein/tie-2-soluble/79167>