Product Data Sheet

Product Name:	TEK Mouse
Cat. No.:	GP22633
Batch No.:	1

Product Data

Purity	>98%	Source	Sf9,Baculovirus cells.
Phycical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	Angiopoietin-1 receptor; Endothelial tyrosine kinase; HYK; STK1; Tunica interna endothelial cell kinase; Tyrosine kinase with Ig and EGF homology domains-2; Tyrosine-protein kinase receptor TEK; Tyrosine-protein kinase receptor TIE-2; mTIE2; p140 TEK; CD202b.		
Amino Acid Sequence	AMDLILINSL PLVSDAETSL TCIASGWHPH EPITIGRDFE ALMNQHQDPLEVTQDVTREW AKKVVWKREK ASKINGAYFC EGRVRGQAIR IRTMKMRQQA SFLPATLTMT VDRGDNVNISFKKVLIKEED AVIYKNGSFI HSVPRHEVPD ILEVHLPHAQ PQDAGVYSAR YIGGNLFTSA FTRLIVRRCEAQKWGPDCSR PCTTCKNNGV CHEDTGECIC PPGFMGRTCE KACEPHTFGR TCKERCSGPE GCKSYVFCLPDPYGCSCATG WRGLQCNEAC PSGYYGPDCK LRCHCTNEEI CDRFQGCLCS QGWQGLQCEK EGRPRMTPQIEDLPDHIEVN SGKFNPICKA SGWPLPTSEE MTLVKPDGTV LQPNDFNYTD RFSVAIFTVN RVLPPDSGVWVCSVNTVAGM VEKPFNISVK VLPEPLHAPN VIDTGHNFAI INISSEPYFG DGPIKSKKLF YKPVNQAWKYIEVTNEIFTL NYLEPRTDYE LCVQLARPGE GGEGHPGPVR RFTTASIGLP PPRGLSLLPK SQTALNLTWQ PIFTNSEDEFYVEVERRSLQ TTSDQQNIKV PGNLTSVLLS NLVPREQYTV RARVNTKAQG EWSEELRAWT LSDILPPQPENIKISNITDS TAMVSWTIVD GYSISSIIIR YKVQGKNEDQ HIDVKIKNAT VTQYQLKGLE PETTYHVDIFAENNIGSSNP AFSHELRTLP HSPASADLGG GKMLHHHHHH.		
Formulation	TEK protein solution (0.5mg/ml) contains Phosphate Buffered Saline (pH 7.4) and 10% glycerol.		

Introduction

TIE-1 (tyrosine kinase with Ig and EGF homology domains 1) and TIE-2/Tek comprise a

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA

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.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time.For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Avoid multiple freeze-thaw cycles.

Background

TEK produced in Sf9 Baculovirus cells is a single,glycosylated polypeptide chain containing 730 amino acids (23-746 a.a.) andhaving a molecular mass of 81.6kDa (Migrates at 70-100kDa on SDS-PAGE underreducing conditions).