

32-13008: TEK Mouse

Alternative Name : 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.

Description

Source: Sf9, Baculovirus cells.

Sterile Filtered colorless solution.

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 display similar angiogenic defects.

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

Product Info

Amount : 2 µg / 10 µg

Purification : Greater than 95.0% as determined by SDS-PAGE.

Content : TEK protein solution (0.5mg/ml) contains Phosphate Buffered Saline (pH 7.4) and 10% glycerol.

Storage condition : 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.

Amino Acid : AMDLILINSL PLVSDAETSL TCIASGWHPH EPITIGRDFE ALMNQHQPDL EVTQDVTREW AKKVWVKREK ASKINGAYFC EGRVGRQAIR IRTMKMRQQA SFLPATLTMT VDRGDNVNIS FKKVLIKEED AVIYKNGSFI HSVPRHEVPD ILEVHLPAAQ PQDAGVYSAR YIGGNLFTSA FTRLIVRRCE AQKWGPDCSR PCTTCKNNGV CHEDTGECIC PPGFMGRTCE KACEPHTFGR TCKERCSGPE GCKSYVFCLP DPYGCSCATG WRGLQCNEAC PSGYYPDCK LRCHCTNEEI CDRFQGCLCS QGWQGLQCEK EGRPRMTPQI EDLPDHIEVN SGKFNPIKA SGWPLPTSEE MTLVKPDGTV LQPNDFNITD RFSVAIFTVN RVLPPDSGVW VCSVNTVAGM VEKPFNISVK VLPEPLHAPN VIDTGHNFAL INISSEPYFG DGPIKSKKLF YKPVNQAWKY IEVTNEIFTL NYLEPRTDYE LCVQLARPGE GGEGHPGPVR RFTTASIGLP PPRGLSLLPK SQTALNLTWQ PIFTNSEDEF YVEVERRSLQ TTSDQQNIKV PGNLTSVLLS NLVPREQYTV RARVNTKAQG EWSEELRAWT LSDILPPQPE NIKISNITDS TAMVSWTIVD GYISSIIIR YKVQGKNEQ HIDVKIKNAT VTQYQLKGLE PETTYHVDIF AENNIGSSNP AFSHELRTLP HSPASADLGG GKMLHHHHHH.