

## TYRO3/DTK Protein, Human (Q261H, HEK293, Fc)

Cat. No.:	HY-P78657
Synonyms:	TYRO3; BYK; DTK; RSE; SKY; TIF
Species:	Human
Source:	HEK293
Accession:	Q06418/AAH51756.1 (A41-S428, Q261H)
Gene ID:	7301
Molecular Weight:	85-120 kDa

### PROPERTIES

AA Sequence	<pre> A G L K L M G A P V   K L T V S Q G Q P V   K L N C S V E G M E   E P D I Q W V K D G A V V Q N L D Q L Y   I P V S E Q H W I G   F L S L K S V E R S   D A G R Y W C Q V E D G G E T E I S Q P   V W L T V E G V P F   F T V E P K D L A V   P P N A P F Q L S C E A V G P P E P V T   I V W W R G T T K I   G G P A P S P S V L   N V T G V T Q S T M F S C E A H N L K G   L A S S R T A T V H   L Q A L P A A P F N   I T V T K L S S S N A S V A W M P G A D   G R A L L Q S C T V   H V T Q A P G G W E   V L A V V V P V P P F T C L L R D L V P   A T N Y S L R V R C   A N A L G P S P Y A   D W V P F Q T K G L A P A S A P Q N L H   A I R T D S G L I L   E W E E V I P E A P   L E G P L G P Y K L S W V Q D N G T Q D   E L T V E G T R A N   L T G W D P Q K D L   I V R V C V S N A V G C G P W S Q P L V   V S S H D R A G Q Q   G P P H S R T S           </pre>
Biological Activity	Immobilized TYRO3 at 2 µg/mL (100 µL/well) can bind Biotinylated GAS6 protein. The ED <sub>50</sub> for this effect is 161.5 ng/mL, corresponding to a specific activity is 6.19×10 <sup>3</sup> Unit/mg.
Appearance	Lyophilized powder.
Formulation	Lyophilized a 0.22 µm filtered solution of 50 mM Tris-HCL, 150 mM NaCl, 100 mM arginine, 100 mM Glycine, pH 7.5.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH <sub>2</sub> O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

### DESCRIPTION

---

**Background**

TYRO3/DTK is a receptor tyrosine kinase that transduces signals from the extracellular matrix to the cytoplasm by binding to several ligands, including TULP1 or GAS6. Regulates many physiological processes, including cell survival, migration, and differentiation. The binding of ligands on the cell surface induced dimerization and autophosphorylation of TYRO3 in the intracellular region, providing docking sites for downstream signaling molecules. After the ligand is activated, it interacts with PIK3R1 to enhance PI3 kinase activity. Activation of AKT survival pathway, including nuclear translocation of NF-kappa-B and up-regulation of NF-kappa-B regulatory genes. TYRO3 signaling plays a role in a variety of processes, such as neuronal protection from excitotoxic damage, platelet aggregation, and cytoskeletal recombination. By activating STAT1, which plays an important role in Toll-like receptor (TLRs) mediated innate immune response, STAT1 selectively induces the production of inhibitors of cytokine signaling pathways SOCS1 and SOCS3. TYRO3 is overexpressed in many types of cancer and has the function of promoting tumor cell survival and/or proliferation, metastasis, and chemotherapy resistance<sup>[1][2]</sup>.

---

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA