

HGFR Protein, Human (sf9, His-GST)

Cat. No.:	HY-P72938
Synonyms:	Hepatocyte growth factor receptor; HGF receptor; SF receptor; MET
Species:	Human
Source:	Sf9 insect cells
Accession:	P08581-1 (K956-S1390)
Gene ID:	4233
Molecular Weight:	Approximately 68 kDa

PROPERTIES

AA Sequence	<pre> K K R K Q I K D L G S E L V R Y D A R V H T P H L D R L V S A R S V S P T T E M V S N E S V D Y R A T F P E D Q F P N S S Q N G S C R Q V Q Y P L T D M S P I L T S G D S D I S S P L L Q N T V H I D L S A L N P E L V Q A V Q H V V I G P S S L I V H F N E V I G R G H F G C V Y H G T L L D N D G K K I H C A V K S L N R I T D I G E V S Q F L T E G I I M K D F S H P N V L S L L G I C L R S E G S P L V V L P Y M K H G D L R N F I R N E T H N P T V K D L I G F G L Q V A K G M K Y L A S K K F V H R D L A A R N C M L D E K F T V K V A D F G L A R D M Y D K E Y Y S V H N K T G A K L P V K W M A L E S L Q T Q K F T T K S D V W S F G V L L W E L M T R G A P P Y P D V N T F D I T V Y L L Q G R R L L Q P E Y C P D P L Y E V M L K C W H P K A E M R P S F S E L V S R I S A I F S T F I G E H Y V H V N A T Y V N V K C V A P Y P S L L S S E D N A D D E V D T R P A S F W E T S </pre>
Biological Activity	<ol style="list-style-type: none"> The specific activity was determined to be >10 nmol/min/mg using MBP as substrate. Measured by its binding ability in a functional ELISA. Immobilized human HGFR (aa 956-1390) at 10 µg/mL (100 µl/well) can bind biotinylated human HGF-his with a linear range of 15.6-125 ng/mL.
Appearance	Solution.
Formulation	Supplied as a 0.2 µm filtered solution of 20 mM Tris, 500 mM NaCl, pH 7.4, 10% glycerol, 3 mM DTT
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	N/A
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice

DESCRIPTION

Background

The HGFR protein, a receptor tyrosine kinase, functions as a signal transducer from the extracellular matrix by binding to hepatocyte growth factor/HGF ligand. It plays a pivotal role in regulating diverse physiological processes, including proliferation, scattering, morphogenesis, and cell survival. Upon ligand binding at the cell surface, HGFR undergoes autophosphorylation on its intracellular domain, creating docking sites for downstream signaling molecules. Upon activation by ligand, it interacts with the PI3-kinase subunit PIK3R1, PLCG1, SRC, GRB2, STAT3, or the adapter GAB1, leading to the activation of multiple signaling cascades, including RAS-ERK, PI3 kinase-AKT, and PLCgamma-PKC. RAS-ERK activation is associated with morphogenetic effects, while PI3K/AKT coordinates prosurvival effects. In embryonic development, HGFR signaling contributes to gastrulation, the development and migration of neuronal precursors, angiogenesis, and kidney formation. During skeletal muscle development, it is crucial for the migration of muscle progenitor cells and the proliferation of secondary myoblasts. In adults, it participates in wound healing, organ regeneration, tissue remodeling, and promotes the differentiation and proliferation of hematopoietic cells. Additionally, in the context of microbial infection, HGFR acts as a receptor for *Listeria monocytogenes* internalin InIB, mediating the entry of the pathogen into cells.

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

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