

HGF recombinant protein

HGF Protein, Human, Recombinant

CATALOG #
AAA257423

HOST
CHO Stable Cells

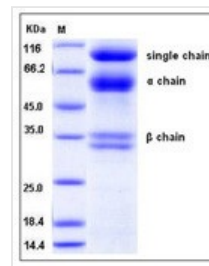
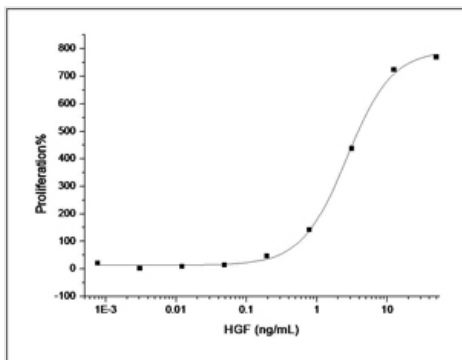
PRODUCT SYNONYMS

HGF; HGF Protein; Human; Recombinant; Human HGF/Hepatocyte Growth Factor Protein; hepatocyte growth factor (hepapoietin A; scatter factor); DFNB39 Protein; F-TCF Protein; F-TCFB Protein; Hepatocyte Growth Factor Protein; HGFB Protein; HPTA Protein; SF Protein; HGF recombinant protein

PRODUCT SPECIFICATIONS

Host	CHO Stable Cells
Purity/Purification	>93 % as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, 1mM Arg., 5% tween2, pH7. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Sequence Positions	697aa
Sequence	Met1-Ser728
Species	Human
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Gln32 (alphachain) & Val495 (betachain)
Protein Construction	JA DNA sequence encoding the human HGF (NP_000592.3) precursor (Met 1-Ser 728) was expressed and purified
Activity	Measured by its ability to neutralize TGF-beta mediated inhibition on Mv-1-Lu cell proliferation. The ED50 for this effect is typically 2-10ng/mL.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. Shipping: They are shipped out with blue ice pack

IMAGES



Application Data

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ADDITIONAL INFORMATION

Related Product Information for HGF recombinant protein	Hepatocyte growth factor, also known as HGF, contains 4 kringle domains, 1 PAN domain, and 1 peptidase S1 domain. It belongs to the peptidase S1 family, plasminogen subfamily. The hepatocyte growth factor is secreted by mesenchymal cells as a single inactive polypeptide and is cleaved by serine proteases into a 69-kDa alpha-chain and 34-kDa beta-chain. A disulfide bond between the alpha and beta chains produces the active, heterodimeric molecule. The hepatocyte growth factor regulates cell growth, cell motility, and morphogenesis by activating a tyrosine kinase signaling cascade after binding to the proto-oncogenic c-Met receptor, and acts as a multi-functional cytokine on cells of mainly epithelial origin. Its ability to stimulate mitogenesis, cell motility and matrix invasion give it a central role in angiogenesis, tumorigenesis, and tissue regeneration. HGF is a potent mitogen for mature parenchymal hepatocyte cells, seems to be an hepatotrophic factor, and acts as a growth factor for a broad spectrum of tissues and cell types. HGF has no detectable protease activity. Defects in hepatocyte growth factor are the cause of deafness autosomal recessive type 39. A form of profound prelingual sensorineural hearing loss. Sensorineural deafness results from damage to the neural receptors of the inner ear, the nerve pathways to the brain, or the area of the brain that receives sound information.
Product Categories/Family for HGF recombinant protein	Cancer Drug Targets
References	Naldini L, et al. (1991) Scatter factor and hepatocyte growth factor are indistinguishable ligands for the MET receptor. EMBO J. 10(10):2867-78. Comoglio, et al. (1993) Structure, biosynthesis and biochemical properties of the HGF receptor in normal and malignant cells. 65:131-65. Hahn W, et al. (2011) Enhanced cardioprotective effects by coexpression of two isoforms of hepatocyte growth factor from naked plasmid DNA in a rat ischemic heart disease model. The Journal of Gene Medicine. 13(10):549-55. Bottaro DP, et al. (1991) Identification of the hepatocyte growth factor receptor as the c-met proto-oncogene product. Science. 251(4995):802-4.

NCBI AND UNIPROT INFORMATION

NCBI GI #	33859835
NCBI GeneID	3082
NCBI Accession #	NP_000592.3
NCBI GenBank Nucleotide #	NM_000601.4
UniProt Accession #	P14210 ; Q02935 ; Q13494 ; Q14519 ; Q3KRB2 ; Q8TCE2 ; Q9BYL9 ; Q9BYM0 ; Q9UDU6 ; A1L3U6
NCBI Official Full Name	hepatocyte growth factor isoform 1 preproprotein
NCBI Official Synonym Full Names	hepatocyte growth factor (hepapoietin A; scatter factor)
NCBI Official Symbol	HGF
NCBI Official Synonym Symbols	SF; HGFB; HPTA; F-TCF; DFNB39
NCBI Protein Information	hepatocyte growth factor; fibroblast-derived tumor cytotoxic factor; hepatopoeitin-A; hepatopietin-A; lung fibroblast-derived mitogen
UniProt Protein Name	Hepatocyte growth factor
UniProt Gene Name	HGF
UniProt Synonym Gene Names	HPTA; SF
UniProt Entry Name	HGF_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.