

32-20545: Recombinant Human HGF (Insect derived)(Discontinued)

Reactivity : Dog, Human, Monkey, Mouse, Rabbit, Rat

Alternative Name : Hepatocyte Growth Factor, Scatter Factor (SF), Hepatopoietin (HPTA)

Description

Source:(BTI-Tn-5B1-4) Hi-5 Insect cells

HGF is a potent, mesenchymally-derived mitogen for mature parenchymal hepatocytes, and acts as a growth factor for a broad spectrum of tissues and cell types. HGF signals through a transmembrane tyrosine kinase receptor known as MET. Activities of HGF include the induction of cell proliferation, motility, morphogenesis, inhibition of cell growth, and enhancement of neuron survival. HGF is a crucial mitogen for liver regeneration processes, especially after partial hepatectomy and other liver injuries. Human and murine HGF are cross-reactive. Human HGF is expressed as a linear, polypeptide-precursor glycoprotein containing 697 amino acid residues. Proteolytic processing of this precursor generates the biologically active heterodimeric form of HGF, which consists of two polypeptide chains (Alpha -chain and Beta -chain) held together by a single disulfide bond resulting in formation of a biologically active heterodimer. The Alpha -chain consists of 463 amino acid residues and four kringle domains. The Beta -chain consists of 234 amino acid residues. Recombinant Human HGF is an 80.0 kDa polypeptide consisting of 697 amino acid residues.

Product Info

Amount : 2 µg / 10 µg

Purification : Purity: >= 98% by SDS-PAGE gel and HPLC analyses.

Content : This recombinant protein is supplied in lyophilized form.

Amino Acid : alpha chain: QRKRRNTIHE FKSAKTTLI KIDPALKIKT KKVNTADQCA NRCTRNGKLP
FTCKAFVFDK ARKQCLWFPF NSMSSGVKKE FGHEFDLYEN KDYIRNCIIG KGRSYKGTVS
ITKSGIKCQP WSSMIPHEHS FLPSSYRGKD LQENYCRNPR GEEGGPWCFD SNPEVRYEVC
DIPQCSEVEC MTCNGESYRG LMDHTESGKI CQRWDHQTPH RHKFLPERYP DKGFDNDYCR
NPDGQPRPWC YTLDPHTRWE YCAIKTCADN TMNDTDVPLE TTECIQGGGE GYRGTVNTIW
NGIPCQRWDS QYPHEHDMTP ENFKCKDLRE NYCRNPDGSE SPWCFTTDPN IRVGYSQIP
NCDMSHGQDC YRGNKKNYMG NLSQTRSGLT CSMWDKNMED LHRHIFWEPD ASKLNENYCR
NPDDDAHGPW CYTGNPLIPW DYCPISRCEG DTTPTIVNLD HPVISCAKTK QLR beta chain:
VVNGIP TRTNIGWMVS LRYRNKHICG GSLIKESWVL TARQCFPSRD LKDYEAWLGI
HDVHGRGDEK CKQVLNVSQV VYGPEGSDLV LMKLARPVL DDFVSTIDLP NYGCTIPEKT
SCSVYGWGYT GLINYDGLLR VAHLYIMGNE KCSQHHRGKV TLNESEICAG AEKIGSGPCE
GDYGGPLVCE QHKMRMVLGV IVPGRGCAIP NRPGIFVRVA YYAKWIHKII LTYKVPQS

Application Note

The ED_{50} was determined by the dose-dependent stimulation of the proliferation of monkey 4MBr-5 cells was found to be in the range of 20.0-40.0 ng/ml.