Hepatocyte Growth Factor, human recombinant (rHuHGF)

Catalog No: 94893
Lot No: XXXXX
Source: Insect cells
Synonyms: Scatter Factor (SF), Hepatopoietin (HPTA), HGF, HGFB, F-TCF

Background

Hepatocyte Growth Factor (HGF) is a multifunctional growth factor which regulates both cell growth and cell motility. It exerts a strong mitogenic effect on hepatocytes and primary epithelial cells. HGF synergizes with Interleukin-3 and GM-CSF to stimulate colony formation of hematopoietic progenitor cells in vitro and may, therefore, also modulate hematopoiesis.

Description

HGF human recombinant produced in Baculovirus is a heterodimer, non-glycosylated, polypeptide chain containing 692 amino acids and having a total molecular mass of 78 kDa. HGF is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

The sterile protein powder (1 mg/ml) is lyophilized from a solution containing 50 mM acetic acid.

Solubility

It is recommended to reconstitute the lyophilized HGF in 50 mM acetic acid to a concentration not less than 100 µg/ml. Further dilutions should be made using buffer containing protein.

Stability

Lyophilized Hepatocyte Growth Factor, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution HGF should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity

Greater than 95.0% as determined by SDS-PAGE.

Amino Acid Sequence

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QRKRRNTIHE FKKSAKTTLI KIDPALKIKT KKVNTADQCA NRCTRNKGLP FTCKAFVFDK ARKQCLWFPF NSMSSGVKKE
FGHEFDLYEN KDYIRNCIIG KGRSYKGTVS ITKSGIKCQP WSSMIPHEHS YRGKDLQENY CRNPRGEEGG PWCFTSNPEV
RYEVCDIPQC SEVEMTCNGE SYRGLMDHTE SGKICQRWDH QTPHRHKFLP ERYPDKGFDD NYCRNPDGQP RPWCYTLDPH
TRWEYCAIKT CADNTMNDTD VPLETTECIQ GQGEGYRGTV NTIWNGIPCQ RWDSQYPHEH DMTPENFKCK DLRENYCRNP
DGSESPWCFT TDPNIRVGYC SQIPNCDMSH GQDCYRGNGK NYMGNLSQTR SGLTCSMWDK NMEDLHRHIF WEPDASKLNE
NYCRNPDDDA HGPWCYTGNP LIPWDYCPIS RCEGDTTPTI VNLDHPVISC AKTKQLRVVN GIPTRTNIGW MVSLRYRNKH
ICGGSLIKES WVLTARQCFP SRDLKDYEAW LGIHDVHGRG DEKCKQVLNV SQLVYGPEGS DLVLMKLARP AVLDDFVSTI
DLPNYGCTIP EKTSCSVYGW GYTGLINYDG LLRVAHLYIM GNEKCSQHHR GKVTLNESEI CAGAEKIGSG PCEGDYGGPL
VCEQHKMRMV LGVIVPGRGC AIPNRPGIFV RVAYYAKWIH KIILTYKVPQ S
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Activity

The activity was assayed for scattering activity in the MDCK cell assay. The ED50 for this effect is typically at 1.0 - 5.0 ng/ml (200,000 - 1,000,000 IU/mg).

Usage

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