Hepatocyte Growth Factor, HEK, human recombinant (rHuHGF-HEK)

Catalog No: 97474
Lot No: XXXXX
Source: HEK293
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 HEK cells is a glycosylated single chain peptide, containing 697 amino acids (Gln-32 to Ser-728) having a total molecular weight of 80 kDa. HGF is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

HGF was lyophilized from a solution (1 mg/ml) comntaining 10 mM sodium phosphate, 150 mM NaCl, 0.01% Tween 80 and 100 mM L-Arginine, pH 6.5.

Solubility

HGF in sterile 18 MΩ-cm H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized HGF, 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 90% as observed by SDS-PAGE.

Amino Acid Sequence

QRKRRNTIHE FKKSAKTTLI KIDPALKIKT KKVNTADQCA NRCTRNKGLP FTCKAFVFDK ARKQCLWFPF NSMSSGVKKE
FGHEFDLYEN KDYIRNCIIG KGRSYKGTVS ITKSGIKCQP WSSMIPHEHS FLPSSYRGKD LQENYCRNPR GEEGGPWCFT
SNPEVRYEVC DIPQCSEVEC MTCNGESYRG LMDHTESGKI CQRWDHQTPH RHKFLPERYP DKGFDDNYCR NPDGQPRPWC
YTLDPHTRWE YCAIKTCADN TMNDTDVPLE TTECIQGQGE GYRGTVNTIW NGIPCQRWDS QYPHEHDMTP ENFKCKDLRE
NYCRNPDGSE SPWCFTTDPN IRVGYCSQIP NCDMSHGQDC YRGNGKNYMG NLSQTRSGLT CSMWDKNMED LHRHIFWEPD
ASKLNENYCR NPDDDAHGPW CYTGNPLIPW DYCPISRCEG DTTPTIVNLD HPVISCAKTK QLRVVNGIPT RTNIGWMVSL
RYRNKHICGG SLIKESWVLT ARQCFPSRDL KDYEAWLGIH DVHGRGDEKC KQVLNVSQLV YGPEGSDLVL MKLARPAVLD
DFVSTIDLPN YGCTIPEKTS CSVYGWGYTG LINYDGLLRV AHLYIMGNEK CSQHHRGKVT LNESEICAGA EKIGSGPCEG
DYGGPLVCEQ HKMRMVLGVI VPGRGCAIPN RPGIFVRVAY YAKWIHKIIL TYKVPQS

Activity

The specific activity was determined by the dose-dependent stimulation of the proliferation of the monkey epithelial cell line 4 MBr-5 (ATCCCCL-208). The EC_{50} for this effect is typically 20 - 40 ng/ml.

Usage

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