

Hepatocyte Growth Factor, human recombinant (rHuHGF-CHO)

Catalog No: 94897 Lot No: XXXXX Source: CHO cells

Synonyms: Scatter Factor (SF), Hepatopoietin (HPTA), HGF

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 CHO is a heterodimer, non-glycosylated, polypeptide chain consisting an a-chain of 463 amino acids and b-chain of 234 having a total molecular mass of 75 kDa. HGF is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

The protein was lyophilized from a concentrated (1.4 mg/ml) solution containing phosphate buffered saline with 0.02% Tween 80, pH 7.4.

Solubility

It is recommended to reconstitute the lyophilized HGF in sterile 18 M Ω -cm H $_2$ O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

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 97.0% as determined by SDS-PAGE.

Amino Acid Sequence

Agrees with the sequence of native human HGF.

Activity

The ED50, calculated by the dose-dependant proliferation of monkey 4 MBr-5 indicator cells was found to be 20 - 40 ng/ml corresponding to a specific activity of 25,000 - 50,000 IU/mg.

Usage

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