

Recombinant Human Hepatocyte Growth Factor (Hepapoinetin A; Scatter factor)

Cat. No. HGF-123H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human Hepatocyte Growth Factor produced in <i>CHO</i> is a heterodimer, non-glycosylated, polypeptide chain consisting of an α -chain of 463 amino acids and a β -chain of 234 having a total molecular mass of 80017 Dalton. The HGF is purified by proprietary chromatographic techniques.
Species	Human
Source	CHO
Description	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.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	Greater than 97.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Formulation	The protein was lyophilized from a concentrated (1mg/ml) solution containing Phosphate-Buffered Saline pH= 7.4 containing 0.05% Tween 20.
Solubility	It is recommended to reconstitute the lyophilized Hepatocyte Growth Factor in sterile

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

Amino Acid Sequence

Agrees with the sequence of native human HGF.

Biological Activity

The ED₅₀, calculated by the dose-dependant proliferation of monkey 4MBr-5 indicator cells was found to be 20-40 ng/ml.

Protein Content

Protein quantitation was carried out by two independent methods: 1. UV spectroscopy at 280 nm using the absorbency value of 1.83 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics). 2. Analysis by RP-HPLC, using a calibrated solution of HGF as a Reference Standard.

Storage

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.

GENE INFORMATION

Gene Name

HGF hepatocyte growth factor (hepapoietin A; scatter factor) [Homo sapiens]

Synonyms

HGF; hepatocyte growth factor (hepapoietin A; scatter factor); SF; HGFB; HPTA; F-TCF; DFNB39; scatter factor; hepatopoietin A; OTTHUMP00000206710; lung fibroblast-derived mitogen; fibroblast-derived tumor cytotoxic factor; DFNB39; deafness, autosomal recessive 39; fibroblast-derived tumor cytotoxic factor; scatter factor; Hepatocyte growth factor; SF; Hepatocyte growth factor alpha chain; Hepatocyte growth factor beta chain

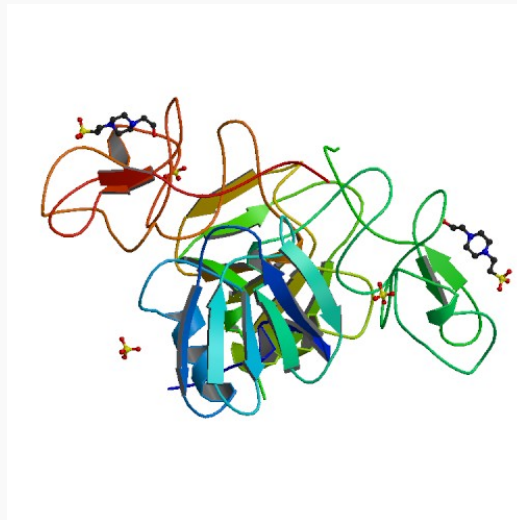
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Gene ID	3082
mRNA Refseq	NM_000601
Protein Refseq	NP_000592
MIM	142409
UniProt ID	P14210
Chromosome Location	7q21.1
Pathway	Cytokine-cytokine receptor interaction; Focal adhesion; Melanoma; Pathways in cancer; Renal cell carcinoma; Hemostasis
Function	catalytic activity; growth factor activity; protein binding; protein heterodimerization activity; serine-type endopeptidase activity

PDB rendering based on 1bht.



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