

TECHNICAL DATA SHEET

Human HGF

Human Hepatocyte Growth factor, recombinant

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

PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING

Size	Order #	Lot #	Expiry Date*
10 µg	W 1468952010	3501062010	November 2010

Description

Human HGF is expressed as a linear 697 amino acid polypeptide precursor glycoprotein. Proteolytic processing of this precursor generates the biologically active form of HGF, which consists of two polypeptide chains (alpha-chain and beta-chain) held 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.

HGF is a mesenchymally derived potent mitogen for mature parenchymal hepatocyte cells 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 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.

- **Biological activity** See below
- **Source** Insect cells
- **Purity** ≥ 98 % (SDS-PAGE; HPLC)
- **Endotoxin level** ≤ 0.1ng per µg (≤ 1EU/µg)
- **Stabilizer** None
- **Buffer** L-Arginine HCL (0.1M) + Tris (10mM, pH8.0) + NaCl (200mM)
- **Physical state** Sterile filtered, lyophilized

Biological activity

The ED₅₀ of 20.0-40.0 ng/ml was determined by the dose-dependent stimulation of the proliferation of monkey 4MBr-5 cells.

Reconstitution

We recommend a quick spin followed by reconstitution in water to a concentration of 0.5mg/ml. This solution can then be diluted into other aqueous buffers and stored at 4°C for 1 week or -20°C for future use.

Stability

The lyophilized protein is stable for at least 2 years from date of receipt at -20°C. Reconstituted HGF is stable for at least 3 months when stored in working aliquots with a carrier protein at -20°C.

Please avoid repeated freeze/thaw cycles.

Usage

FOR RESEARCH USE ONLY

NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES

* For lyophilized product if stored as indicated. Please contact our technical support if the product has expired.

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