

### **Datasheet**

# **Hepatocyte Growth Factor**

#### **Human Recombinant**

Product	Description	Catalogue-No.	Size
HGF	Hepatocyte growth factor, human recombinant from CHO	CB-1108011	10 μg

#### **Product 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. HGF human recombinant produced in CHO is a heterodimer, non-glycosylated, polypeptide chain consisting of an alpha-chain of 463 amino acids and beta-chain of 234 amino acids having a total molecular mass of 75 kDa. The HGF is purified by proprietary chromatographic techniques.

## Solubility and storage conditions

It is recommended to reconstitute the lyophilized HGF in sterile distilled water not less than  $100\mu g/ml$ , which can then be further diluted to other aqueous solutions.

Lyophilized HGF although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution HGF should be stored at 2-8° C between up to 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.

# Composition

Sterile filtered white lyophilized (freeze-dried) powder. 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% (1 mg/ml) solution. 2. Analysis by RP-HPLC, using a calibrated solution of HGF as a reference standard. The protein was lyophilized from a concentrated solution containing phosphate-buffered saline with 0.02% Tween 80, pH 7.4.

Amino acid sequence: Identical to the sequence of native human HGF

Purity: > 97.0% as determined by (a) Analysis by RP-HPLC (b) Analysis by SDS-PAGE.

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

### Suitability

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY! Not approved for human or animal diagnostic or therapeutic procedures.

# **Technical Support**

For technical support or questions or please contact your local PAN-Biotech partner or the technical department of PAN-Biotech via email <a href="mailto:info@pan-biotech.com">info@pan-biotech.com</a>

3/2015