

HGF

Hepatocyte Growth Factor

human, recombinant, Baculovirus

Cat. No.	Amount
PR-438	10 μ g

For *in vitro* use only
Quality guaranteed for 12 months
Store at -20°C

Avoid freeze / thaw cycles

Form

Lyophilized from a solution containing 50mM acetic acid.

Solubility

It is recommended to reconstitute the lyophilized HGF in sterile bidest H₂O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Activity

EC₅₀:0.5-1.0 ng/ml, calculated by the scattering activity in the MDCK cell assay.

Molecular Weight

78 kDa

Purity

≥ 90% by SDS-PAGE and RP-HPLC

Description

Recombinant Human HGF produced in a Baculovirus system is a heterodimer, non-glycosylated polypeptide chain, consisting of an α -chain of 463 amino acids and β -chain of 234 having a total molecular mass of 78.0 kDa.

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 is purified by proprietary chromatographic techniques.

Selected References:

Kashiwakura *et al.* (2005) Hepatocyte growth factor receptor is a coreceptor for adeno-associated virus type 2 infection. *J. Virol.* **79**:609.

Takami *et al.* (2004) Inhibition of hepatocyte growth factor induction in human dermal fibroblasts by interleukin-1 and its prevention by interferon-gamma. *Biochem. Biophys. Res. Commun.* **325**:676.

Kaido *et al.* (2004) Interleukin-6 augments hepatocyte growth factor-induced liver regeneration; involvement of STAT3 activation. *Hepatogastroenterology* **51**:1667.

Oe *et al.* (2004) Simultaneous transfer of vascular endothelial growth factor and hepatocyte growth factor genes effectively promotes liver regeneration after hepatectomy in cirrhotic rats. *Hepatogastroenterology* **51**:1641.

Scarpino *et al.* (2005) Hepatocyte growth factor (HGF) downregulates thrombospondin 1 (TSP-1) expression in thyroid papillary carcinoma cells. *J. Pathol.* **205**:50.

Hernandez *et al.* (2004) Intravitreal levels of hepatocyte growth factor/scatter factor and vascular cell adhesion molecule-1 in the vitreous fluid of diabetic patients with proliferative retinopathy. *Diabetes Metab.* **30**:341.