

# Recombinant Rat Hepatocyte growth factor/HGF Protein

Catalog No.: RP01776 Recombinant

# **Sequence Information**

**Species Gene ID Swiss Prot** HEK293 cells 24446 P17945

Tags C-His

Synonyms

HPTA; Hepatocyte growth

factor; HGF

# **Product Information**

**Source** Purification HEK293 cells ≥ 90 % as

≥ 90 % as determined by SDS-PAGE.

#### **Endotoxin**

 $< 0.1 \, \text{EU/}\mu\text{g}$  of the protein by LAL method.

#### **Formulation**

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.

#### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## **Contact**

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www.abclonal.com

# **Background**

Hepatocyte growth factor/scatter factor (HGF/SF) is a paracrine cellular growth, motility and morphogenic factor. It belongs to the peptidase S1 family and Plasminogen subfamily, contains 4 kringle domains, 1 PANdomain and 1 peptidase S1 domain. HGF regulates cell growth, cell motility, and morphogenesis by activating a tyrosine kinase signaling cascade after binding to the proto-oncogenic c-Met receptor. HGF is secreted bymesenchymal cells and acts as a multi-functional cytokine on cells of mainly epithelial origin. Its ability tostimulate mitogenesis, cell motility, and matrix invasion gives it a central role in angiogenesis, tumorogenesis, and tissue regeneration.

#### **Basic Information**

## Description

Recombinant Rat Hepatocyte growth factor/HGF Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Gln 33-Leu728) of rat HGF (Accession #NP\_058713.1) fused with and a 6×His tag at the C-terminus.

## **Bio-Activity**

Measured in a cell proliferation assay using Mv.1.lu cells. The ED<sub>50</sub> for this effect is 1.6-6.2 ng/mL, corresponding to a specific activity of  $1.6 \times 10^5 \sim 6.3 \times 10^5$  units/mg.

#### Storage

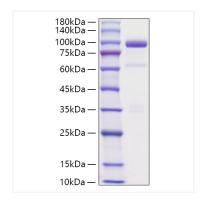
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

After reconstitution, the protein solution is stable at  $-20^{\circ}$ C for 3 months, at  $2-8^{\circ}$ C for up to 1 week.

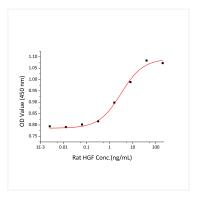
Avoid repeated freeze/thaw cycles.

<sup>\*</sup> For your safety and health, please wear a lab coat and disposable gloves when handling.

# **Validation Data**



Recombinant Rat Hepatocyte growth factor/HGF Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Recombinant Rat HGF stimulates cell proliferation of the Mv.1.lu cells. The ED $_{50}$  for this effect is 1.6-6.2 ng/mL, corresponding to a specific activity of  $1.6 \times 10^5 \sim 6.3 \times 10^5$  units/mg.