

# Human HGF Protein

Cat. No. HGF-HM101

## Description

<b>Source</b>	Recombinant Human HGF Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Gln32-Ser728.
<b>Accession</b>	P14210-1
<b>Molecular Weight</b>	The HGF single chain can be processed into the active form of disulfide-linked heterodimer of $\alpha$ and $\beta$ chain. The protein has a predicted MW of 79.6 kDa (after cleavage of the signal peptide). Due to glycosylation, the protein migrates to 60-65 kDa and 30-40 kDa corresponding to $\alpha$ chain and $\beta$ chain based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 0.1 EU per $\mu$ g by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

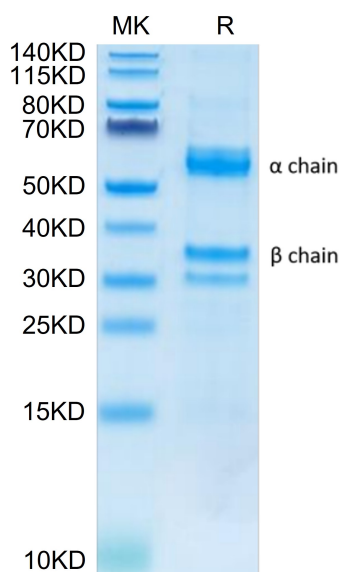
<b>Formulation</b>	Lyophilized from 0.22 $\mu$ m filtered solution in PBS, 200mM L-arginine (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Hepatocyte growth factor (HGF) is an important component of the pathophysiology of IR, with increased levels in most common IR conditions, including obesity. HGF has a role in the metabolic flux of glucose in different insulin sensitive cell types.

## Assay Data

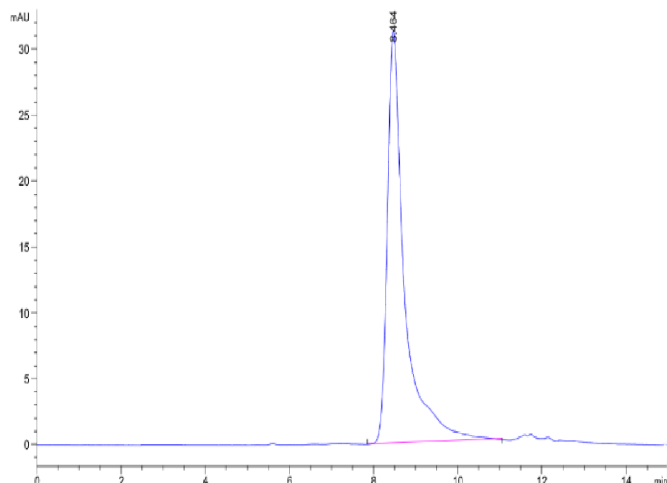
### Bis-Tris PAGE



Human HGF on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

Assay Data

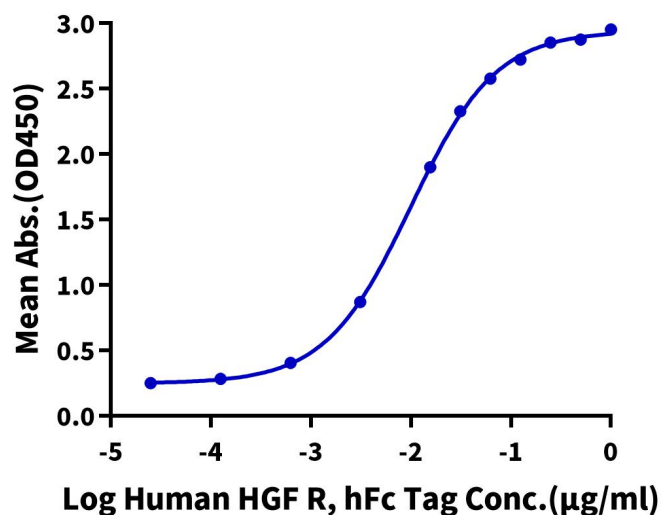


The purity of Human HGF Protein is greater than 95% as determined by SEC-HPLC.

ELISA Data

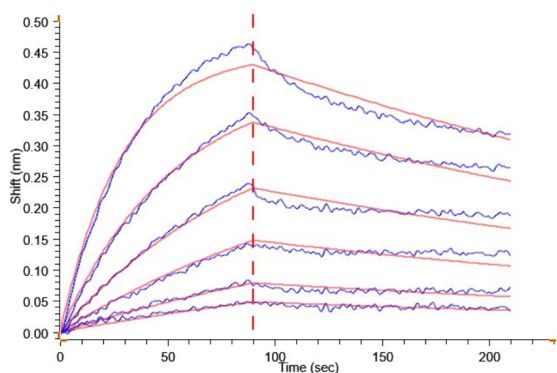
**Human HGF, His Tag ELISA**

0.2µg Human HGF, His Tag Per Well



Immobilized Human HGF, His Tag at 2µg/ml (100µl/Well) on the plate. Dose response curve for Human HGF R, hFc Tag with the EC50 of 9.9ng/ml determined by ELISA.

BLI Data



Loaded Human HGF R, hFc Tag on ProA-Biosensor can bind Human HGF, His Tag with an affinity constant of 4.32 nM as determined in BLI assay (Gator® Prime).