

# Human HGF Protein

Cat. No. HGF-HM201

## Description

<b>Source</b>	Recombinant Human HGF Protein is expressed from HEK293 with hFc 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 corresponding to $\alpha$ chain and $\beta$ chain based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu$ g by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

## Formulation and Storage

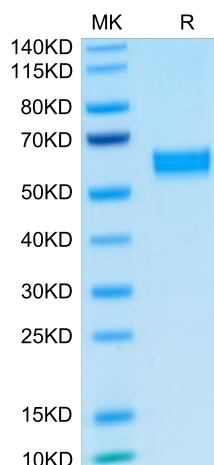
<b>Formulation</b>	Lyophilized from 0.22 $\mu$ m filtered solution in PBS, 100mM L-arginine (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu$ g/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months after reconstitution. 2-8°C for 2-7 days 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; plays a key role in  $\beta$ -cell homeostasis; and is capable of modulating the inflammatory response. HGF plays a central role in these metabolic disorders, HGF levels could be employed as a biomarker for disease status/progression, and HGF/c-Met signaling pathway modulators could effectively regulate IR and treat diabetes.

## Assay Data

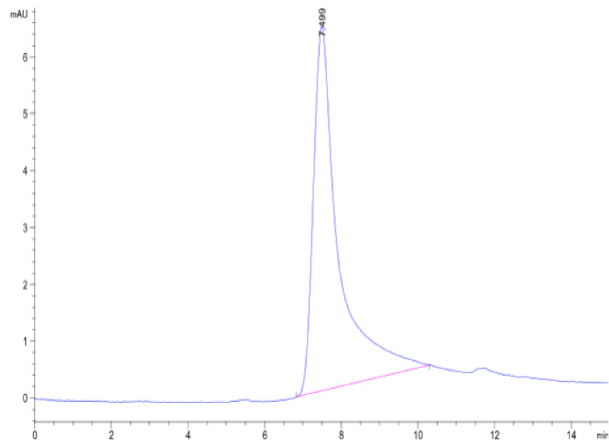
### Tris-Bis PAGE



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

### SEC-HPLC

Assay Data



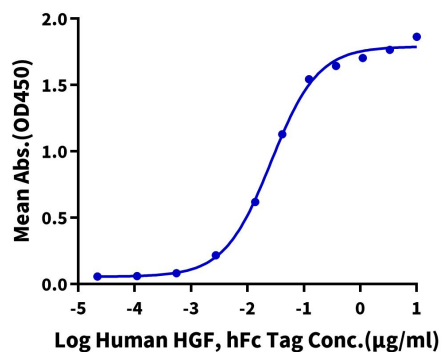
The purity of Human HGF is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

**Human HGF, hFc Tag ELISA**

0.1µg Human HGF R, His Tag Per Well



Immobilized Human HGF R, His Tag at 1µg/ml (100µl/Well) on the plate. Dose response curve for Human HGF, hFc Tag with the EC50 of 26.3ng/ml determined by ELISA.