

Human HGF Protein, Ultra Low Endotoxin

Cat. No. HGF-HM201-UL



Description

Source	Recombinant Human HGF Protein is expressed from HEK293 with hFc tag at the C-terminus.
	It contains Gln32-Ser728.
Accession	P14210-1
Molecular Weight	The HGF single chain can be processed into the active form of disulfide-linked heterodimer of α and β 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 α chain and β chain based on Bis-Tris PAGE result.
Endotoxin	Less than 0.01 EU per μ g by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE
	> 95% as determined by HPLC

Formulation and Storage

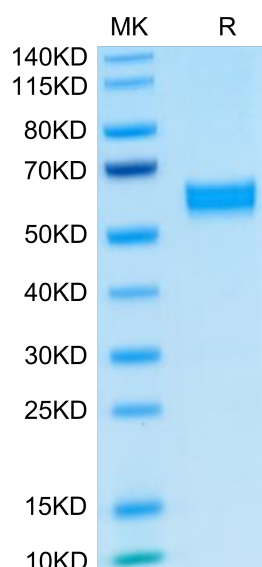
Formulation	Lyophilized from 0.22 μ m filtered solution in PBS, 100 mM L-arginine (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-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; plays a key role in β -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

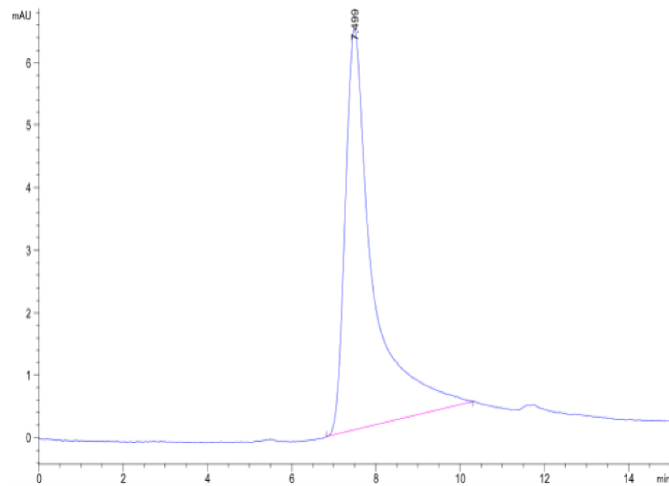
Bis-Tris PAGE



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

SEC-HPLC

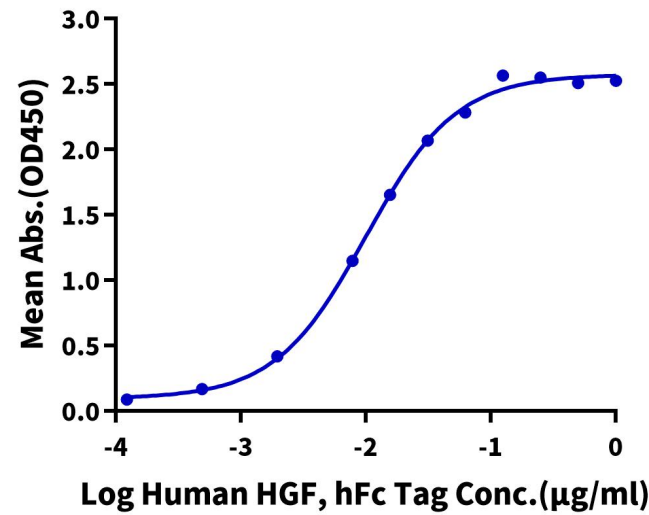
Assay Data



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

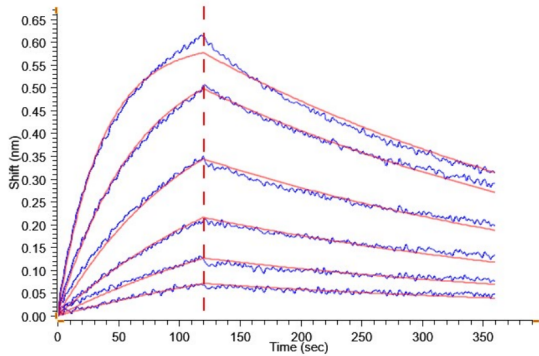
ELISA Data

Human HGF, hFc Tag ELISA
0.2μg Human HGF R, His Tag Per Well



Immobilized Human HGF R, His Tag at 2μg/ml (100 μl/Well) on the plate. Dose response curve for Human HGF, hFc Tag with the EC50 of 10.0 ng/ml determined by ELISA (QC Test).

BLI Data



Loaded Human HGF, hFc Tag on ProA-Biosensor, can bind Human HGF R, His-Avi Tag with an affinity constant of 9.93 nM as determined in BLI assay (Gator® Prime).