Catalog # HGF-H5218



Synonym

HGF,HPTA,SF

Source

Human HGF Protein, premium grade(HGF-H5218) is expressed from human 293 cells (HEK293). It contains AA Gln 32 - Ser 728 (Accession # <u>P14210-1</u>). Predicted N-terminus: Gln 32

It is produced under our rigorous quality control system that incorporates a comprehensive set of tests including sterility and endotoxin tests. Product performance is carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage. When ready to transition into later clinical phases, we also offer a custom GMP protein service that tailors to your needs. We will work with you to customize and develop a GMP-grade product in accordance with your requests that also meets the requirements for raw and ancillary materials use in cell manufacturing of cell-based therapies.

Molecular Characterization

HGF(Gln 32 - Ser 728) P14210-1

This protein carries no "tag".

The protein has a calculated MW of 79.7 kDa. The protein migrates as 97 kDa±3 kDa under reducing (R) condition, and 81 kDa when calibrated against <u>Star</u> <u>Ribbon Pre-stained Protein Marker</u> under non-reducing (NR) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.01 EU per μg by the LAL method.

Sterility

Negative

Mycoplasma

Negative.

Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μ m filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

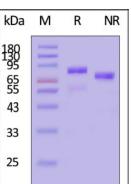
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

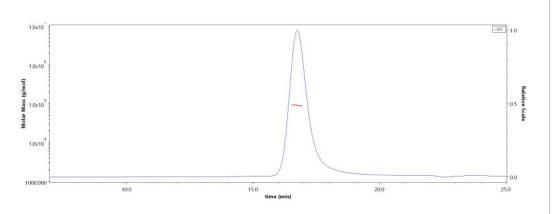
This product is stable after storage at:

- -20°C to -70°C for 24 months in lyophilized state;
- 70° C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



SEC-MALS





Human HGF Protein, premium grade on SDS-PAGE under reducing (R) and non-reducing (NR) conditions. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With <u>Star Ribbon Pre-stained Protein</u> <u>Marker</u>). The purity of Human HGF Protein, premium grade (Cat. No. HGF-H5218) is more than 95% and the molecular weight of this protein is around 80-110 kDa verified by SEC-MALS. <u>Report</u>

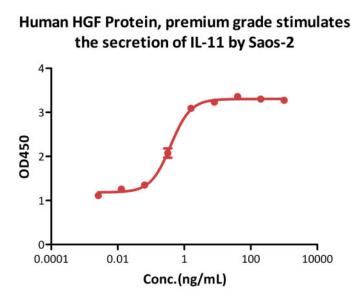




Catalog # HGF-H5218

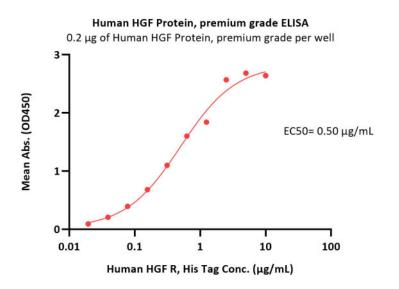


Bioactivity-Bioactivity CELL BASE



Human HGF Protein, premium grade (Cat. No. HGF-H5218) stimulates the secretion of IL-11 by Saos-2 cells. The EC50 for this effect is 0.390 ng/mL (Routinely tested).

Bioactivity-ELISA



Immobilized Human HGF Protein, premium grade (Cat. No. HGF-H5218) at 2 μ g/mL (100 μ L/well) can bind Human HGF R, His Tag (Cat. No. MET-H5227) with a linear range of 0.02-2.5 μ g/mL (QC tested).

Background

Insulin receptor (INSR) is also known as CD antigen CD220, which can be cleaved into the following 2 chains: Insulin receptor subunit alpha and Insulin receptor subunit beta. INSR is a tetramer of 2 alpha and 2 beta chains linked by disulfide bonds. The alpha chains carry the insulin-binding regions, while the beta chains carry the kinase domain. Forms a hybrid receptor with IGF1R, the hybrid is a tetramer consisting of 1 alpha chain and 1 beta chain of INSR and 1 alpha chain and 1 beta chain of IGF1R. In addition to binding insulin, the insulin receptor can bind insulin-like growth factors (IGF1 and IGF1I). Isoform Short of INSR has a higher affinity for IGF1I binding. When present in a hybrid receptor with IGF1R, INSR binds IGF1.

Clinical and Translational Updates

