Recombinant Human HGF (C-6His)

Catalog No.: RP0017

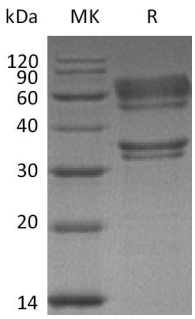
Basic Information

Information	
Source	*Human Cells*
Description	Recombinant Human Hepatocyte Growth Factor is produced by our Mammalian expression system and the target gene encoding Gln32-Ser728 is expressed with a 6His tag at the C-terminus.
Accession	P14210
Known As	Hepatocyte growth factor; HPTA; HGF; SF; Scatter factor; Hepatopoietin-A
Predicted Mol Mass	26&53.7 KDa
Apparent Mol Mass	32-38&50-65 KDa, reducing conditions

Properties	
Formulation	Lyophilized from a 0.2 μm filtered solution of 20mM Tris， 500mM NaCl，3%Trehalose，0.02% Tween 80，pH 8.0.
Storage	Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.
Endotoxin	< 0.01 EU/μg as determined by LAL test.
Reconstitution	Always centrifuge tubes before opening.Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.

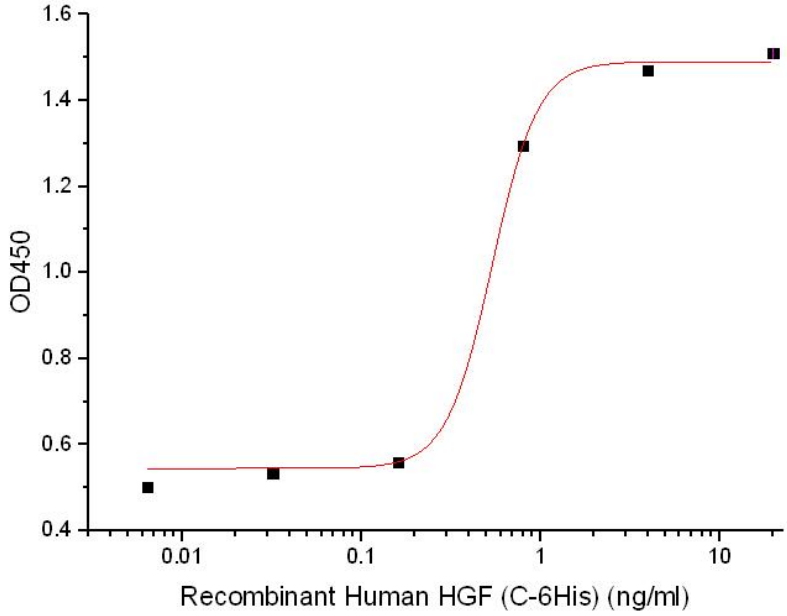
Experimental Data

Purity-SDS-PAGE



Greater than 95% as determined by reducing SDS-PAGE. (QC verified)

Bioactivity-Cell Based Assay



Measured by its ability to induce IL-11 secretion by Saos-2 human osteosarcoma cells. The ED50 for this effect is 0.3-1.5 ng/ml (QC verified).

Background

HGF, is a pleiotropic protein in the Plasminogen subfamily of S1 peptidases and contains 4 kringle domains, 1 PAN domain and 1 peptidase S1 domain. HGF is secreted as an inactive 728 amino acid (aa) single chain propeptide. It is cleaved after the fourth Kringle domain by a serine protease to form bioactive disulfide-linked HGF with a 60 kDa alpha and 30 kDa beta chain. HGF binds heparan-sulfate proteoglycans and the widely expressed receptor tyrosine kinase, HGF R/c-MET. HGF regulates epithelial morphogenesis by inducing cell scattering and branching tubulogenesis. It can also alter epithelium morphology by the induction of nectin-1 alpha ectodomain shedding, an adhesion protein component of adherens junctions. 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 by mesenchymal cells and acts as a multi-functional cytokine on cells of mainly epithelial origin. Its ability to stimulate mitogenesis, cell motility, and matrix invasion gives it a central role in angiogenesis, tumorogenesis, and tissue regeneration.