

CHASELECTION**Recombinant Human HGF****货号(Catalog Number):** CY107FXXXX(L)**别名(synonym):** DFNB39; EC 3.4.21; EC 3.4.21.7; fibroblast-derived tumor cytotoxic factor; F-TCF;HGF; HGFB; HPTA**来源(Source):** Human embryonic kidney cell, HEK293-derived human HGF protein**蛋白结构 (Structure):**

该蛋白不含标签

基因 ID: P14210**氨基酸序列:**

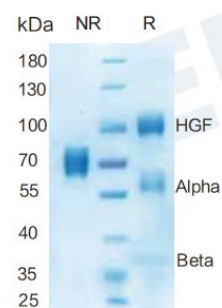
Gln32-Ser728

分子量大小(MW):

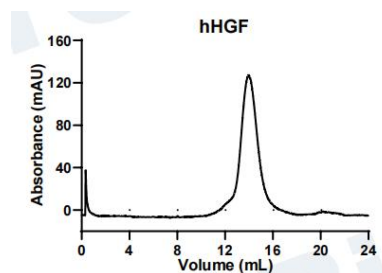
53.7 kDa (alpha chain) + 26 kDa (beta chain)

纯度 (Purity) :

> 95%, determined by SDS-PAGE.

SDS-PAGE

4 ug/lane protein was resolved with SDS-PAGE under non-reducing (NR) and reducing (R) conditions and visualized by Coomassie Blue staining.

Gel filtration

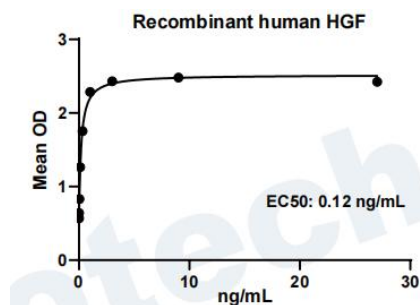
size-exclusion chromatography of recombinant human HGF protein (280 nm absorbance)

**内毒素含量(Endotoxin):** <0.010 EU per 1 ug of the protein by the LAL method.**制剂(Formulation):**

Solution protein.

Dissolved in sterile PBS buffer.

This solution can be diluted into other aqueous buffers. Centrifuge the vial prior to opening.

活性检测 (Biological Activity) :

Recombinant human HGF induces IL11 secretion by Saos-2 human osteosarcoma cells.

储存与运输(Storage):

Avoid repeated freeze-thaw cycles.

It is recommended that the protein be aliquoted for optimal storage.

36 months from date of receipt, -20 to -70 °C as supplied.

产品背景介绍 (Production):

FHepatocyte Growth Factor (HGF) also known as scatter factor and hepatopoietin A, is a pleiotropic protein in the plasminogen subfamily of S1 peptidases. It is a multidomain molecule that includes an N-terminal PAN/APPLE-like domain, four Kringle domains, and a serine proteinase-like domain that has no detectable protease activity. Human 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. Alternate splicing generates human HGF isoforms that lack the proteinase-like domain and different numbers of the Kringle domains. Human HGF shares 91%-94%

aa sequence identity with bovine, canine, feline, mouse, and rat HGF. HGF binds heparan-sulfate proteoglycans

and the widely expressed receptor tyrosine kinase, HGF R/c-MET. HGF-dependent c-MET activation is implicated in the development of many human cancers . HGF regulates epithelial morphogenesis by inducing cell scattering and branching tubulogenesis. HGF induces the up-regulation of integrin alpha 2 beta 1 in epithelial cells by a selective increase in alpha 2 gene transcription. This integrin serves as a collagen I receptor, and its blockade disrupts epithelial cell branching tubulogenesis. HGF can also alter epithelium morphology by the induction of nectin-1 alpha ectodomain shedding, an adhesion protein component of adherens junctions . In the thyroid, HGF induces the proliferation, motility, and loss of differentiation markers of thyrocytes and inhibits TSH-stimulated iodine uptake . HGF promotes the motility of cardiac stem cells in damaged myocardium .

