

Hepatocyte Growth Factor Active Protein | Hgf active protein

Mouse Hepatocyte Growth Factor Recombinant

CATALOG #	HOST
AAA76400	Chinese Hamster Ovary cell line (Note: Host protein expression may be lot-specific and can be subject to change during production, including bulk orders.)

PRODUCT SYNONYMS

Hepatocyte Growth Factor; Mouse Hepatocyte Growth Factor Recombinant; Hgf active protein

PRODUCT SPECIFICATIONS

Host	Chinese Hamster Ovary cell line (Note: Host protein expression may be lot-specific and can be subject to change during production, including bulk orders.)
Purity/Purification	>97%, as determined by SDS-PAGE and HPLC
Form/Format	Mouse HGF was lyophilized from a 0.2 um filtered solution in 2.5% glycine, 0.5% sucrose, 0.01% Tween80, 5 mM Glutamic acid, pH 4.5.
Sequence	MMWGTKLLPV LLLQHVLHL LLLHVAIPYA EGQKKRRNTL HEFKKSAKTT 50LTKEPLL KIKTKKVNSA DECANRCIRN RGFTFTCKAF VFDKSRKRCY WY100PFNSM SSGVKKGFH EFDLYENKDY IRNCIIGKGG SYKGTVSITK SGIKC150QP WNSMIPHEHS FLPSSYRGKD LQENYCRNPR GEEGGPWCFT SNPEVRYE20 0VCDIPQCSE VECMTCNGES YRGPMDHTEG GKTCQRWDQQ TPHRHKFLPE R250YDPKGF DDNYCRNPDG KPRPWCYTLD PDTWWEYCAI KTCASAVNE TDVP300MET TECIQGQGEY YRGTSNTIWN GIPCQRWDSQ YPHKHDITPE NFKCKDL350 RENYCRNPDG AESPWCFTTD PNIRVGYSQ IPKCDVSSGQ DCYRGNGKNY 400MGNSLKT RSGLTCSMWD KNMEDLHRHI FWEPDASKLN KNYCRNPDG AHG450PWCY TGNPLIPWDY CPISRCEGDT TPTIVNLDHP VISCAKTKQL R>VVNGI500 PTQTTVGWMV SLKYRNKHC GGSLIKESWV LTARQCFPAR NKDLKDYEA 550LGIHDVH ERGEEKRKQI LNISQLVYGP EGSDLVLLKL ARPAILDNFV STI600DLPS YGCTIPEKTT CSIYGWGYTG LINADGLLRV AHLYIMGNEK CSQHHQ650G KVTLSNELC AGAEKIGSGP CEGDYGGPLI CEQHKMRMVL GVIVPGRGC7 00AIPNRPDI FVRVAYYAKW IHKVILTYKL
Source	Optimized DNA sequence encoding Mouse Hepatocyte Growth Factor mature chain was expressed in Chinese Hamster Ovary cell line.
Endotoxin	Endotoxin content was assayed using a LAL gel clot method. Endotoxin level was found to be less than 0.1 ng/ug (1EU/ug).
Biological Activity	The ED(50) was determined by the dose-dependent stimulation of the proliferation of murine BNL-CL2 cell line was found to be in the range of 20.0-40.0 ng/ml.

Method

2.4. In Vitro Hepatic DifferentiationPrior to starting the hepatic differentiation, medium>MSCs at passage 5 were maintained in the regular medium>MSC culture medium until at 80-90% confluence. The hepatic differentiation was elicited in the differentiation-inducing medium, which consisted of MEM supplemented with 10% FBS, 10?ng/mL hepatocyte growth factor (HGF), 10?ng/mL basic fibroblast growth factor (bFGF) and 10?ng/mL oncostatin M (&system). The medium was changed every 3 days, and the cells were cultured for 8 days.

In vitro differentiation of hepatocyte-like cells from undifferentiated iPS cells

>Stage 3: Differentiation of Premature Hepatocyte-Like Cells (5-11).

At day 5, the medium was replaced by Knockout DMEM supplemented with 1% KSR, 1% nonessential amino acids, 1% l-glutamic acid, 1% dimethyl sulfoxide (DMSO), and 100 ng/ml hepatocyte growth factor (HGF) to induce premature hepatocyte-like cells.

The medium was replaced every two days.

Cell CultureNPCs were prepared from striatum of embryonic day 17 to 18 (E17-18) old rats and the cells were plated in dishes (5×106 cells per 10 cm dish,,) and cultivated in a medium>serum-free medium>DMEM/F12 medium in the presence of B27 supplement and 20 ng/ml epidermal growth factor (EGF) at +37 degree C in 5% CO2

Cell culture and hepatic cell differentiationHuh7 and Huh7.5 cells were provided by Jane C. Moores (The Reagent of the University of California, Oakland, CA).The cells were maintained in medium>Dulbecco's medium>modified medium>Eagle's medium (DMEM;,,) containing 10% FBS and 1% penicillin/streptomycin in a humidified incubator at 37 degree C with 5% CO2.

For hepatic differentiation, passages 3-7 of AT-hMSCs were plated at 1×104 cells/cm2 and incubated overnight. The cells were then washed with phosphate-buffered saline (PBS) and incubated in basal medium [60% DMEM-low glucose, 40% MCDB201, and 1% penicillin/streptomycin] with 20 ng/ml EGF and 10 ng/ml bFGF for 2 days. After incubation, hepatogenic cytokines and growth factors were sequentially added as follows: days 0-7 (step 1), basal medium with 20 ng/ml HGF and 10 ng/ml bFGF; and days 7-21 (step 2), basal medium containing 20 ng/ml oncostatin M, 1 umol/L dexamethasone, and 50 mg/ml insulin-transferrin-selenium (ITS) premix.The media were changed every 3 days.

Differentiation of hESCs into dopaminergic neurons, osteoblasts, and hepatocytes

Derivation of hepatocytes from hESCs was carried out as previously described (uM dexamethasone for 5 days.

Molecular Function

Growth-factor, Serine-protease-homolog

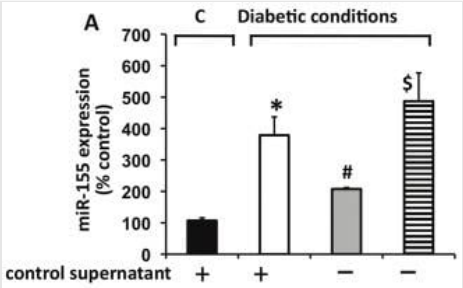
Reconstitution

A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers

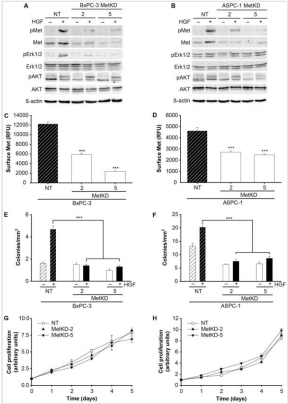
Preparation and Storage

The lyophilized protein is stable for at least 2 years from date of receipt at-20 degree C. Upon reconstitution, this cytokine can be stored in working aliquots at 2 degree -8 degree C for one month, or at-20 degree C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.

IMAGES



Application Data
Conditioned media from BMPC regulates miR-155 expression and fibrogenic response in mouse cardiac fibroblasts in vitro. Neutralizing antibodies against HGF (HGF-Ab) reversed this effect as compared to IgG treated cells.



Application Data
Met knockdown reduces BxPC-3 and ASPC-1 cell survival. BxPC-3 or ASPC-1 cells infected with recombinant lentivirus expressing Met knockdown shRNAs (2 or 5) or a non targeting shRNA were treated without or with HGF and examined by Western analysis for pMet (Y1234/1235), Met, pErk1/2, Erk1/2, pAKT, AKT and ̢-actin levels (n=?=3).

ADDITIONAL INFORMATION

Product Categories/Family for Hgf active protein	Cytokines; Mouse reagents; Recombinant Mouse Cytokines
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NCBI AND UNIPROT INFORMATION

NCBI GI #	575501559
NCBI GeneID	15234
NCBI Accession #	NP_001276387.1
NCBI GenBank Nucleotide #	NM_001289458.1
UniProt Accession #	Q08048; P08581 MET_HUMAN; P46414
Molecular Weight	24,308 Da
NCBI Official Full Name	hepatocyte growth factor isoform 1 preproprotein
NCBI Official Synonym Full Names	hepatocyte growth factor
NCBI Official Symbol	Hgf
NCBI Official Synonym Symbols	SF; NK1; NK2; HGF/SF; SF/HGF; C230052L06Rik
NCBI Protein Information	hepatocyte growth factor
UniProt Protein Name	Hepatocyte growth factor
UniProt Gene Name	Hgf
UniProt Synonym Gene Names	SF
UniProt Entry Name	HGF_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/chinese-hamster-ovary-cell-line-note-host-protein-expression-may-be-lot-specific-and-can-be-subject-to-change-during-production-including-bulk-orders-active-protein/hepatocyte-growth-factor/76400>