

# HGF, murine recombinant

|                            |  |       |
|----------------------------|--|-------|
| <b>CATALOG #:</b>          | 7160-10  | 10 µg |
|                            | 7160-50  | 50 µg |
| <b>ALTERNATE NAMES:</b>    | Scatter Factor (SF), Hepatopoietin (HPTA)  |       |
| <b>SOURCE:</b>             | (BTI-Tn-5B1-4) Hi-5 Insect Cells   |       |
| <b>PURITY:</b>             | ≥ 95% by SDS-PAGE gel and HPLC analyses  |       |
| <b>MOL. WEIGHT:</b>        | ~85 kDa  |       |
| <b>ENDOTOXIN LEVEL:</b>    | < 0.1 ng/µg of protein (<1EU/µg).  |       |
| <b>FORM:</b>               | Lyophilized  |       |
| <b>FORMULATION:</b>        | Sterile filtered through a 0.2 micron filter. Lyophilized from 10 mM Tris, pH 7.2, 100 mM L-Arginine, 200 mM NaCl.     |       |
| <b>STORAGE CONDITIONS:</b> | Store at -20°C. After reconstitution, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles. |       |

**RECONSTITUTION:**

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

**DESCRIPTION:**

HGF is a mesenchymally derived potent mitogen for mature parenchymal hepatocyte cells and acts as a growth factor for a broad spectrum of tissues and cell types. HGF signals through a transmembrane tyrosine kinase receptor known as MET. Activities of HGF include induction of cell proliferation, motility, morphogenesis, inhibition of cell growth, and enhancement of neuron survival. HGF is a crucial mitogen for liver regeneration processes, especially after partial hepatectomy and other liver injuries. Human and murine HGF are cross-reactive. Murine HGF is expressed as a linear 728 amino acid polypeptide precursor glycoprotein. Proteolytic processing of this precursor generates the biologically active form of HGF, which consists of two polypeptide chains ( $\alpha$ -chain and  $\beta$ -chain) held

by a single disulfide bond resulting in formation of a biologically active heterodimer. The  $\alpha$ -chain consists of 463 amino acid residues and four kringle domains. The  $\beta$ -chain consists of 233 amino acid residues.

**BIOLOGICAL ACTIVITY:**

Determined by the dose-dependent stimulation of the proliferation of mouse IMCD3 cells using a concentration range of 10-20 ng/ml.

**AMINO ACID SEQUENCE:**

**Alpha chain:** QKKRRNTLHE FKSAKTTLT KEDPLLKIKT KKVNSADECA  
 NRCIRNRGFT FTCKAFVFDK SRKRCYWYPF NSMSSGVKKG  
 FGHEFDLYEN KDYIRNCIIG KGGSYKGTVS ITKSGIKCQP WNSMIPHEHS  
 FLPSSYRGKD LQENYCRNPR GEEGGPWCF TSNPEVRYEVC DIPQCSEVEC  
 MTCNGESYRG PMDHTEGKT CQRWDQQTTPH RHKFLPERYP DKGFDNNYCR  
 NPDGKPRPWC YTLDPDTPWE YCAIKTCAHS AVNETDVPME TTECIQQGQE  
 GYRGTSNTIW NGIPCQRWDS QYPHKHDITP ENFKCKDLRE NYCNRNPDGAE  
 SPWCFTTDPN IRVGYCSQIP KCDVSSGQDC YRNGNKNYMG NLSKTRSGLT  
 CSMWWDKNMED LHRHIFWEPD ASKLNKNYCR NPDDDAHGPW CYTGNPLIPW  
 DYCPISRCEG DTTPTIVNLD HPVISCATK QLR  
**Beta chain:** VVNGIPTQTT VGWMVSLKYR NKHICGGLI KESWVLTARQ  
 CFPARNKDLK DYEAWLGIHD VHERGEEKRK QILNISQLVY GPEGSDLVLL  
 KLARPAILDN FVSTIDLPSY GCTIPEKTTT SIYGWGYTGL INADGLLRVA HLYIMGNEKC  
 SQHHQGVVTL NESELCAGAE KIGSGPCEGD YGGPLICEQH  
 KMRMVLGVIV PGRGCAIPNR PGIFVRVAYY AKWIIHKVILT YKL

**RELATED PRODUCTS:**

- HGF, human recombinant (Cat # 4509-10, -1000)
- HGF, human recombinant (Cat # 4510-10, -50, -1000)
- Human Cell<sup>exp</sup> Human Recombinant G-CSF (Cat # 6453-10, -50)
- Human Cell<sup>exp</sup> Human Recombinant GM-CSF (Cat # 6454-10, -50)
- G-CSF, human recombinant (Cat # 4094-10, -50, -1000)
- G-CSF, murine recombinant (Cat # 4095-10, -50, -1000)
- GM-CSF, murine recombinant (Cat # 4101-10, -100, -1000)
- GM-CSF, Rat recombinant (Cat # 4102-10, -100, -1000)
- G-CSF Antibody (Cat # 5094R-100)
- G-CSF Blocking Peptide (Cat # 5094RBP-50)

**FOR RESEARCH USE ONLY! Not to be used in humans.**