



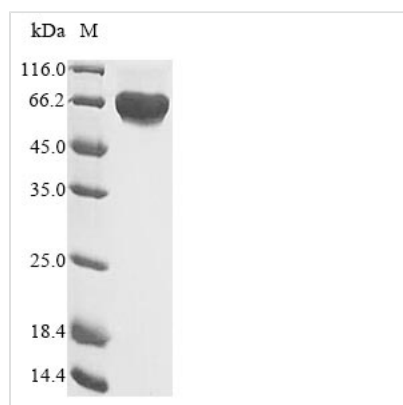
Recombinant Human Hepatocyte growth factor receptor (MET), partial

Product Code	CSB-EP013714HU1
Relevance	Receptor tyrosine kinase that transduces signals from the extracellular matrix into the cytoplasm by binding to hepatocyte growth factor/HGF ligand. Regulates many physiological processes including proliferation, scattering, morphogenesis and survival. Ligand binding at the cell surface induces autophosphorylation of MET on its intracellular domain that provides docking sites for downstream signaling molecules. Following activation by ligand, interacts with the PI3-kinase subunit PIK3R1, PLCG1, SRC, GRB2, STAT3 or the adapter GAB1. Recruitment of these downstream effectors by MET leads to the activation of several signaling cascades including the RAS-ERK, PI3 kinase-AKT, or PLCgamma-PKC. The RAS-ERK activation is associated with the morphogenetic effects while PI3K/AKT coordinates prosurvival effects. During embryonic development, MET signaling plays a role in gastrulation, development and migration of muscles and neuronal precursors, angiogenesis and kidney formation. In adults, participates in wound healing as well as organ regeneration and tissue remodeling. Promotes also differentiation and proliferation of hematopoietic cells. May regulate cortical bone osteogenesis
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P08581
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	IQNVILHEHHIFLGATNYIYVLNEEDLQKVAEYKTGPVLEHPDCFCPCQDCSSKANLSGGVWWDNINMALVVDITYDDQLISCGSVNRGTCQRHVFPNHTADIQSEVHCIFSPQIEEPSQCPDCVVSALGAKVLSSVKDRFINFFVGNTINSSYFPDHPLHSISVRRLLKETKDGFMFLTDQSYIDVLPEFRDSYPIKYVHAFESNNFIYFLTVQRETLD AQT FHTRIIRFCSINSG LHSYMEMPLECILTEKRKKRSTKKEVFN ILQAAYVSKPGAQLARQIGASLNDDILFGVFAQSKPDSAEPMDRSAMCAFP IKYVNDFFNKIVNKNNVRCLQH FYGPNHEHCFNR TLLRNSSGCEARRDEYRTEFTTALQRVDLFMGQFSEVLLTSISTFIKGLTIANLGTSEGRFMQVVVSRSGPSTPHVNFLLD SHPV SPEVIVEHTLNQNGYTLVITGKKITKIPLNGLGCRHFQSCSQCLSAPPFVQCGWCHDKCVRSEECLSGTWTQQICL
Lead Time	3-7 business days
Research Area	Epigenetics and Nuclear Signaling
Source	E.coli
Gene Names	MET



Protein Names	HGF/SF receptor Proto-oncogene c-Met Scatter factor receptor Short name: SF receptor Tyrosine-protein kinase Met
Expression Region	52-562aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	C-terminal 6xHis-tagged
Mol. Weight	59.4 kDa
Protein Description	Partial

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The synthesis of Recombinant Human MET protein began with the isolation of MET gene from the native genome. The next step was to amplify the MET gene by inserting the MET gene into an expression vector and then introducing the vector into the selected host cell, E.coli. Significant amounts of recombinant Human MET protein were produced by the host only when expression genes were added. For the purpose of protein purification, the vector contains C-terminal 6xHis tag to the MET DNA sequence. The purity of this protein is 85%+ determined by SDS-PAGE.

MET, also known as the N-methyl-N'-nitroso-guanidine human osteosarcoma transforming gene, is a proto-oncogene encoding a receptor tyrosine kinase c-MET for hepatocyte growth factor (HGF). The binding of HGF results in c-MET dimerization and autophosphorylation, which in turn activates the mitogen-activated protein kinase (MAPK), phosphatidylinositol 3-kinase (PI3K), v-src avian sarcoma (Schmidt-Ruppin A-2) viral oncogene homolog (SRC), and signal transducer and activator of transcription (STAT) signaling pathways. The MET pathway plays an important role in wound healing, post-injury response, and degenerative diseases such as renal and lung fibrosis. Aberrant MET expression is widely observed in various malignancies, particularly non-small cell lung cancer (NSCLC), gastrointestinal (GI) cancer, and hepatocellular carcinoma (HCC). MET-receptor overexpression, genomic amplification, mutation, or alternative splicing results in cellular deregulation of MET.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a



concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.