# Human c-MET / HGFR Protein (ECD, His & Fc Tag)

Catalog Number: 10692-H03H



## **General Information**

## Gene Name Synonym:

AUTS9; c-Met; DFNB97; HGFR; RCCP2

### **Protein Construction:**

A DNA sequence encoding the extracellular domain (Met1-Thr932) of human c-Met (NP\_000236.2) was fused with the C-terminal polyhistidine-tagged Fc region of human IgG1 at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

**QC** Testing

Purity: ≥ 95 % as determined by SDS-PAGE. ≥ 95 % as determined by

SEC-HPLC.

## **Bio Activity:**

Measured by its binding ability in a functional ELISA. Immobilized recombinant human HGF at 1  $\mu$ g/ml (100 $\nu$ l/well) can bind Human c-MET / HGFR with a linear range of 0.31-160 $\nu$ ng/ml

## **Endotoxin:**

< 1.0 EU per µg of the protein as determined by the LAL method

Predicted N terminal: Glu 25

### Molecular Mass:

The mature recombinant human c-Met/Fc is a disulfide-linked tetramer composed of two proteolytically cleaved  $\alpha$  and  $\beta$  subunits. Each  $\alpha$  and  $\beta$  together with the C-terminal Fc tag consists of 1155 amino acids and has a predicted molecular mass of 129.5 ( $\alpha$  =32.5 + Fc tagged  $\beta$ =97) kDa. The rh c-MET/Fc heterodimer thus migrates with apparent molecular mass of approximately 57.8 kDa and 130 kDa respectively in SDS-PAGE under reducing conditions due to glycosylation.

## Formulation:

Lyophilized from sterile PBS, 8% Trehalose, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## **Usage Guide**

## Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

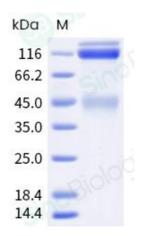
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

## Avoid repeated freeze-thaw cycles.

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

### SDS-PAGE:



## **Protein Description**

Hepatocyte growth factor receptor (HGFR), also known as c-Met or mesenchymal-epithelial transition factor (MET), is a receptor tyrosine kinase (RTK) that has been shown to be overexpressed and/or mutated in a variety of malignancies. HGFR protein is produced as a single-chain precursor, and HGF is the only known ligand. Normal HGF/HGFR signaling is essential for embryonic development, tissue repair or wound healing, whereas aberrantly active HGFR has been strongly implicated in tumorigenesis, particularly in the development of invasive and metastatic phenotypes. HGFR protein is a multifaceted regulator of growth, motility, and invasion, and is normally expressed by cells of epithelial origin. Preclinical studies suggest that targeting aberrant HGFR signaling could be an attractive therapy in cancer.

## References

- 1.McGill GG, et al. (2006) c-Met expression is regulated by Mitf in the melanocyte lineage. J Biol Chem. 281(15): 10365-73.
- 2.Garcia S, et al. (2007) c-Met overexpression in inflammatory breast carcinomas: automated quantification on tissue microarrays. British journal of cancer. 96(2): 329-35.
- 3. Socoteanu MP, et al. (2008) c-Met targeted therapy of cholangiocarcinoma. World J Gastroenterol. 14(19): 2990-4.