

Synonym

MET,AUTS9,HGFR,RCCP2,c-Met

Source

Rhesus macaque HGF R,Fc Tag(MET-R5256) is expressed from human 293 cells (HEK293). It contains AA Glu 25 - Asn 930 (Accession # <u>G7MM61-1</u>). Predicted N-terminus: Glu 25

Molecular Characterization

HGF R(Glu 25 - Asn 930) Fc(Pro 100 - Lys 330) G7MM61-1 P01857

This protein carries a human IgG1 Fc tag at the C-terminus. The mature form of HGF R is a disulfide-linked heterodimer composed of proteolytically cleaved α and β chain. The protein has a calculated MW of 127.8 kDa (α chain 32.5 kDa and β chain 95.3 kDa). The protein migrates as >116 kDa (alpha & beta chain), 45 kDa (α chain) and 113-116 (β chain) kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from $0.22~\mu m$ filtered solution in 50~mM Tris, 100~mM Glycine, 25~mM Arginine, 150~mM NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

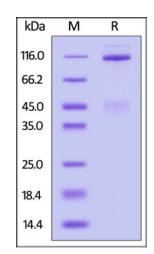
For long term storage, the product should be stored at lyophilized state at -20 $^{\circ}$ C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Rhesus macaque HGF R,Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

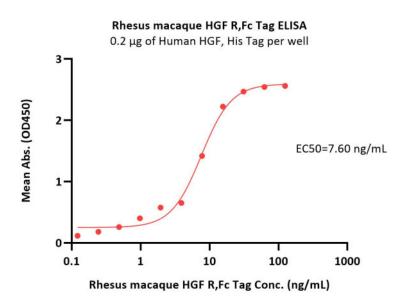
Bioactivity-ELISA



Rhesus macaque HGF R / c-MET Protein, Fc Tag







Immobilized Human HGF, His Tag (Cat. No. HGF-H52H3) at 2 μ g/mL (100 μ L/well) can bind Rhesus macaque HGF R,Fc Tag (Cat. No. MET-R5256) with a linear range of 0.1-16 ng/mL (QC tested).

Background

Hepatocyte growth factor receptor (HGFR) is also known as mesenchymal-epithelial transition factor (MET), c-Met, and is a glycosylated receptor tyrosine kinase that plays a central role in epithelial morphogenesis and cancer development. HGFR protein possesses tyrosine-kinase activity. The primary single chain precursor protein is post-translationally cleaved to produce the alpha and beta subunits, which are disulfide linked to form the mature receptor. HGFR is normally expressed by cells of epithelial origin, while expression of HGF is restricted to cells of mesenchymal origin. Upon HGF stimulation, HGFR induces several biological responses that collectively give rise to a program known as invasive growth. Abnormal HGFR activation in cancer correlates with poor prognosis, where aberrantly active HGFR triggers tumor growth, formation of new blood vessels (angiogenesis) that supply the tumor with nutrients, and cancer spread to other organs (metastasis). HGFR is deregulated in many types of human malignancies, including cancers of kidney, liver, stomach, breast, and brain. Normally, only stem cells and progenitor cells express HGFR, However, cancer stem cells are thought to hijack the ability of normal stem cells to express HGFR, and thus become the cause of cancer persistence and spread to other sites in the body. Various mutations in the HGFR gene are associated with papillary renal carcinoma. HGFR mediates a complex program known as invasive growth. Activation of HGFR triggers mitogenesis, and morphogenesis.

Clinical and Translational Updates

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.

