Canine c-MET / HGFR Protein (His Tag)

Catalog Number: 70008-D08H

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Biological Solution Specialist

General Information

Gene Name Synonym:

AUTS9; c-Met; DFNB97; HGFR; RCCP2; AI838057; c-Met; HGF; HGFR; Par4

Protein Construction:

A DNA sequence encoding the extracellular domain of canine MET (NP_001002963.1) (Met 1-Leu 935) was expressed, with a polyhistidine tag at the N-terminus.

Source: Canine

Expression Host: Human Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio Activity:

1. Measured by its binding ability in a functional ELISA. 2. Immobilized human HGF (Cat:10463-HNAS) at 10 μg/mL (100 μl/well) can bind canine c-MET (Cat:70008-D08H), The EC_{50} of canine c-MET (Cat:70008-D08H) is 7 ng/mL. 3. Immobilized canine MET-His at 10 μg/ml (100 μl/well) can bind biotinylated human HGF-His (Cat:10463-H08H), The EC50 of biotinylated human HGF-His (Cat:10463-H08H) is 0.11-0.25 μg/ml.

Endotoxin:

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

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Glu 25

Molecular Mass:

The recombinant canine c-Met is a disulfide-linked heterodimer composed of proteolytically cleaved α and β subunits. Each α and β subunit together consists of 922 amino acids and has a predicted molecular mass of 103 (α =33 + β =70) kDa. As a result of glycosylation, the apparent molecular mass of the canine c-Met is approximately 42-47 kDa and 85-95 kDa respectively in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, 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

Storage:

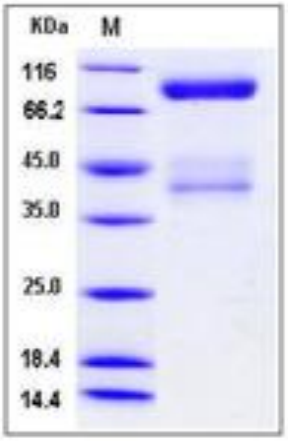
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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.