

HGFR/c-Met Protein, Canine, Recombinant (His)

General Information

Synonyms:	MET proto-oncogene, receptor tyrosine kinase
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. Predicted N terminal: Glu 25
Species:	Canine
Expression Host:	HEK293 Cells
Accession:	Q75ZY9
Molecular Weight:	103 kDa (predicted); 42-47 kDa and 85-95 kDa (reducing condition, due to glycosylation)

QC Testing

Biological Activity:	1. Measured by its binding ability in a functional ELISA. 2. Immobilized human HGF at 10 µg/mL (100 µl/well) can bind canine c-MET, The EC50 of canine c-MET is 7 ng/mL.
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/µg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 µm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:
A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Hepatocyte growth factor receptor (HGFR), also known as c-Met or mesenchymal-epithelial transition factor (MET), is a receptor tyrosine kinase (RTK) that is 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. Cancer Immunotherapy Immune Checkpoint Immunotherapy Targeted Therapy

Reference

- McGill GG, et al. (2006) c-Met expression is regulated by Mitf in the melanocyte lineage. *J Biol Chem.* 281(15): 10365-73.
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- Socoteanu MP, et al. (2008) c-Met targeted therapy of cholangiocarcinoma. *World J Gastroenterol.* 14(19): 2990-4.
- Kong DS, et al. (2009) Prognostic significance of c-Met expression in glioblastomas. *Cancer.* 115(1): 140-8.

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