

HGFR/c-MET

Catalog # PVGS1628

Specification

HGFR/c-MET - Product Information

Primary Accession **Species** Human <u>P08581</u>

Sequence Glu25-Thr932

Purity > 95% as analyzed by SDS-PAGE
> 95% as analyzed by HPLC

Endotoxin Level \leq 1 EU/ µg of protein by LAL method

Biological Activity Immobilized Human c-MET, His & Avi Tag at 2.0 μ g/ml (100 μ l/Well). Dose response curve for Human HGF, hFc Tag with the EC₅₀ of 0.16 μ g/ml determined by ELISA.

Expression System Expi293

Formulation

Lyophilized from a 0.22 µm filtered solution in PBS, pH 7.4. Normally 5 % trehalose is added as protectant before lyophilization.

Reconstitution

It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in distilled water up to $100 \mu g/ml$.

Storage & Stability

Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Avoid repeated freeze-thaw cycles.

HGFR/c-MET - Additional Information

Gene ID 4233

Other Names

Hepatocyte growth factor receptor, HGF receptor, 2.7.10.1, HGF/SF receptor, Proto-oncogene c-Met, Scatter factor receptor, SF receptor, Tyrosine-protein kinase Met, MET

Target Background

c-Met, also called tyrosine-protein kinase Met or hepatocyte growth factor receptor (HGFR), is a protein that in humans is encoded by the MET gene. The 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. 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.

HGFR/c-MET - Protein Information

Name MET

Function

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 neuronal precursors, angiogenesis and kidney formation. During skeletal muscle development, it is crucial for the migration of muscle progenitor cells and for the proliferation of secondary myoblasts (By similarity). In adults, participates in wound healing as well as organ regeneration and tissue remodeling. Also promotes differentiation and proliferation of hematopoietic cells. May regulate cortical bone osteogenesis (By similarity).

Cellular Location Membrane; Single-pass type I membrane protein.

Tissue Location

Expressed in normal hepatocytes as well as in epithelial cells lining the stomach, the small and the large intestine Found also in basal keratinocytes of esophagus and skin. High levels are found in liver, gastrointestinal tract, thyroid and kidney. Also present in the brain. Expressed in metaphyseal bone (at protein level) (PubMed:26637977).

HGFR/c-MET - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

HGFR/c-MET - Images