SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

[Marker Primary Antibody]

Rabbit Anti-Phospho-Met (Tyr1234 + Tyr1235)/AF647 Conjugated antibody

Catalog Number: SL3272R-AF647

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	Anti-Phospho-Met (Tyr1234 + Tyr1235)/AF647
Immunogen:	KLH conjugated synthesised phosphopeptide derived from human Met around the phosphorylation site of Tyr1234/1235
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Applications:	IF=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Human,Mouse(predicted:Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,Sheep)
Background:	background: c-Met, a member of the tyrosine kinase superfamily, is the receptor for hepatocyte growth factor, also known as scatter factor (HGF/SF). The mature c-Met protein is a disulfide-linked heterodimer with Mr=190 kDa composed of a heavily glycosylated alpha subunit that is completely extracellular in localization, and a beta subunit comprising an extracellular ligand binding domain, a single transmembrane domain, and a cytoplasmic tyrosine kinase domain. Cells expressing c-Met include epithelial cells, endothelial cells, blood cells of various types, and glomerular mesenchymal cells. **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

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

	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 muscles and neuronal precursors, angiogenesis and kidney formation. In adults, participates in wound healing as well as organ regeneration and tissue remodeling. Promotes also differentiation and proliferation of hematopoietic cells. Acts as a receptor for Listeria internalin inlB, mediating entry of the pathogen into cells. **Subunit:** Heterodimer made of an alpha chain (50 kDa) and a beta chain (145 kDa) which are disulfide linked. Binds PLXNB1. Interacts when phosphorylated with downstream effectors including STAT3, PIK3R1, SRC, PCLG1, GRB2 and GAB1. Interacts with SPSB1, SPSB2 and SPSB4 (By similarity). Interacts with INPP5D/SHIP1. When phosphorylated at Tyr-1356, interacts with INPPL1/SHIP2. Interacts with RANBP9 and RANBP10, as well as SPSB1, SPSB2, SPSB3 and SPSB4. SPSB1 binding occurs in the presence and in the absence of HGF, however HGF treatment has a positive effect on this interaction. Interacts with MUC20; prevents interaction with GRB2 and suppresses hepatocyte growth factor-induced cell proliferation. Interacts with GRB10. **Subcellular Location:** Membrane; Single-pass type I membrane protein. Isoform 3: Secreted. **Tissue Specificity:** 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. **Post-translational modifications:** Autophosphorylated in response to ligand binding on Tyr-1234 and Tyr-1235 in the kinase domain leading to further phosphorylation of Tyr-1349 and Tyr-1356 in the C-terminal multifunctional docking site. Dephosphorylated by PTPRJ at Tyr-1349 and Tyr-1365. Ubiquitinated. Ubiquitination by CBL regulates the receptor stability and activity through proteasomal degradation. DISEASE: Note=Activation of MET after rearrangement with the TPR gene produces an oncogenic protein.

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

	Note=Defects in MET may be associated with gastric cancer. Hepatocellular carcinoma (HCC) [MIM:114550]: A primary malignant neoplasm of epithelial liver cells. The major risk factors for HCC are chronic hepatitis B virus (HBV) infection, chronic hepatitis C virus (HCV) infection, prolonged dietary aflatoxin exposure, alcoholic cirrhosis, and cirrhosis due to other causes. Note=The disease is caused by mutations affecting the gene represented in this entry. Renal cell carcinoma papillary (RCCP) [MIM:605074]: A subtype of renal cell carcinoma tending to show a tubulo-papillary architecture formed by numerous, irregular, finger-like projections of connective tissue. Renal cell carcinoma is a heterogeneous group of sporadic or hereditary carcinoma derived from cells of the proximal renal tubular epithelium. Note=The disease is caused by mutations affecting the gene represented in this entry. Note=A common allele in the promoter region of the MET shows genetic association with susceptibility to autism in some families. Functional assays indicate a decrease in MET promoter activity and altered binding of specific transcription factor complexes. Note=MET activating mutations may be involved in the development of a highly malignant, metastatic syndrome known as cancer of unknown primary origin (CUP) or primary occult malignancy. Systemic neoplastic spread is generally a late event in cancer progression. However, in some instances, distant dissemination arises at a very early stage, so that metastases reach clinical relevance before primary lesions. Sometimes, the primary lesions cannot be identified in spite of the progresses in the diagnosis of malignancies. **Similarity:** Belongs to the protein kinase superfamily. Tyr protein kinase family. Contains 3 IPT/TIG domains. Contains 1 protein kinase domain. Contains 1 Sema domain. **Database links:** **Entrez Gene:** 4233 Human **Entrez Gene:** 17295 Mouse **Entrez Gene:** 24553 Rat Omim: 164860 Human **SwissProt:** P08581 Human **SwissProt:** P16056 Mouse **SwissProt:** P97523 Rat **Unigene:** 132966 Human **Unigene:** 86844 Mouse **Unigene:** 10617 Rat

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

	Important **Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. The cell membrane receptors (Membrane Receptors) c-Met protein is the Hepatocyte growth factor receptor (HGFR), also known as receptor protein tyrosine kinase. The binding of hepatocyte growth factor to overexpressed c-Met (HGFR) protein plays an important role in Tumour development, progression, and angiogenesis. c-met protein is also a specific receptor for HGF and possesses intrinsic tyrosine kinase activity. The specific binding of HGF to c-met protein may be importantly associated with Tumour cell growth, differentiation, and malignant transformation.