

Rabbit Anti-MET antibody

SL0668R

Product Name MET

Chinese Name 肝细胞生长因子受体抗体

Alias MET_HUMAN; Hepatocyte growth factor receptor; EC:2.7.10.1; HGF receptor; HGF/SF receptor; Proto-oncogene c-Met; Scatter factor receptor (SF receptor); Tyrosine-protein kinase Met; MET proto-oncogene, receptor tyrosine kinase; DA11; HGFR; AUTS9; RCCP2; c-Met; c Met; DFNB97;

Research Area Tumour Cell biology immunology Chromatin and nuclear signals Signal transduction Growth factors and hormones transcriptional regulatory factor Kinases and Phosphatases Epigenetics

Immunogen Species Rabbit

Clonality Polyclonal

React Species Human, Mouse, Rat,

Applications WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000 (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 33/123/156kDa

Cellular localization The cell membrane Secretory protein

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human MET: 25-150/1390 <Extracellular>

Lsotype IgG

Purification affinity purified by Protein A

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention This product as supplied is intended for research use only, not for use in human, therapeutic

or diagnostic applications.

PubMed

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This gene encodes a member of the receptor tyrosine kinase family of proteins and the product of the proto-oncogene MET. The encoded preproprotein is proteolytically processed to generate alpha and beta subunits that are linked via disulfide bonds to form the mature receptor. Further processing of the beta subunit results in the formation of the M10 peptide, which has been shown to reduce lung fibrosis. Binding of its ligand, hepatocyte growth factor, induces dimerization and activation of the receptor, which plays a role in cellular survival, embryogenesis, and cellular migration and invasion. Mutations in this gene are associated with papillary renal cell carcinoma, hepatocellular carcinoma, and various head and neck cancers. Amplification and overexpression of this gene are also associated with multiple human cancers. [provided by RefSeq, May 2016]

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 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.

Product Detail

Acts as a receptor for Listeria internalin inIB, 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.

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.

SWISS:

P08581

Gene ID:
4233

Database links:

[Entrez Gene: 4233](#) Human

[Entrez Gene: 17295](#) Mouse

[Entrez Gene: 24553](#) Rat

[SwissProt: P08581](#) Human

[SwissProt: P16056](#) Mouse

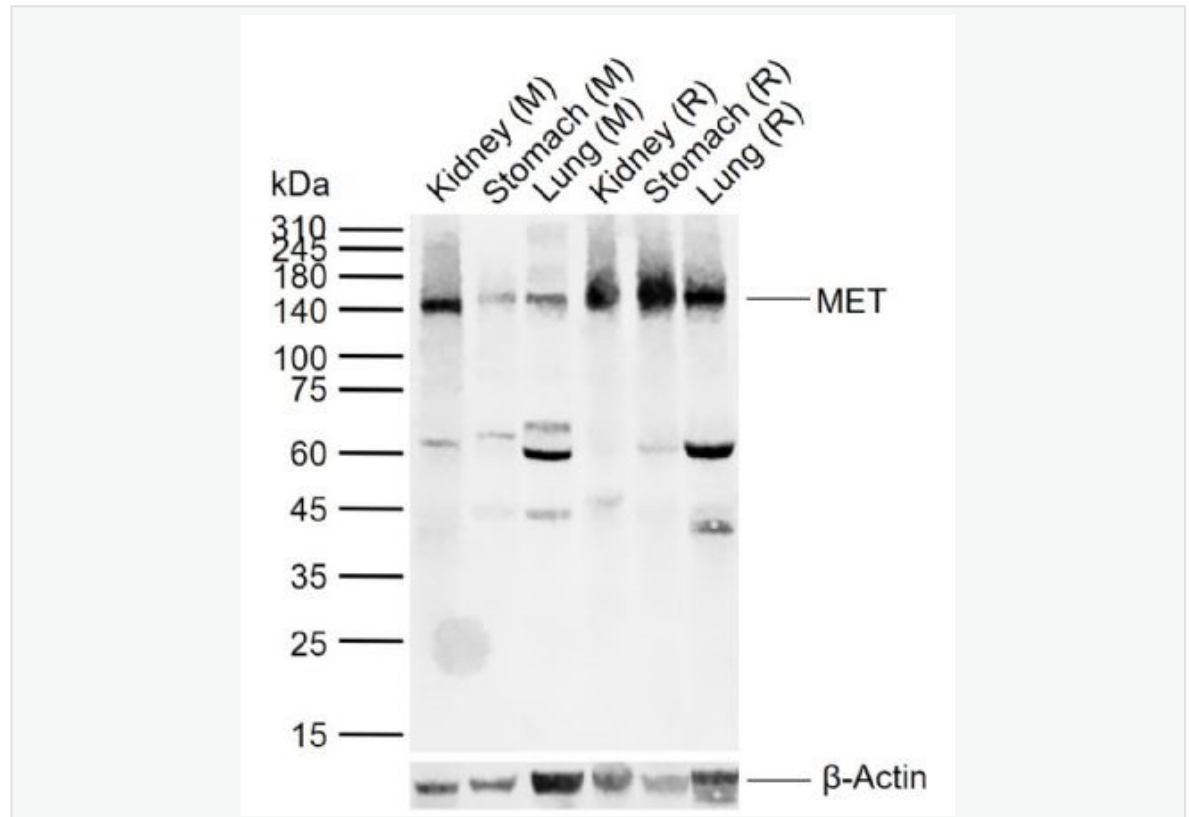
[SwissProt: P97523](#) Rat

The cell membrane 受体 (Membrane Receptors)

c-Met 蛋白是肝细胞生长因子受体 (Hepatocyte growth factor receptor, HGFR)，又称受体蛋白酪氨酸激酶，肝细胞生长因子和过度表达的 c-Met(HGFR)蛋白结合，在 Tumour 的发生、进展和血管形成中都起着重要作用。

c-met 蛋白也是 HGF 特异性受体，具有内源性酪氨酸激酶的活性，HGF 与 c-met 蛋白特异性结合对 Tumour 细胞生长、分化及恶性转化可能具有重要的关联。

**Product
Picture**



Sample:

Lane 1: Mouse Kidney tissue lysates

Lane 2: Mouse Stomach tissue lysates

Lane 3: Mouse Lung tissue lysates

Lane 4: Rat Kidney tissue lysates

Lane 5: Rat Stomach tissue lysates

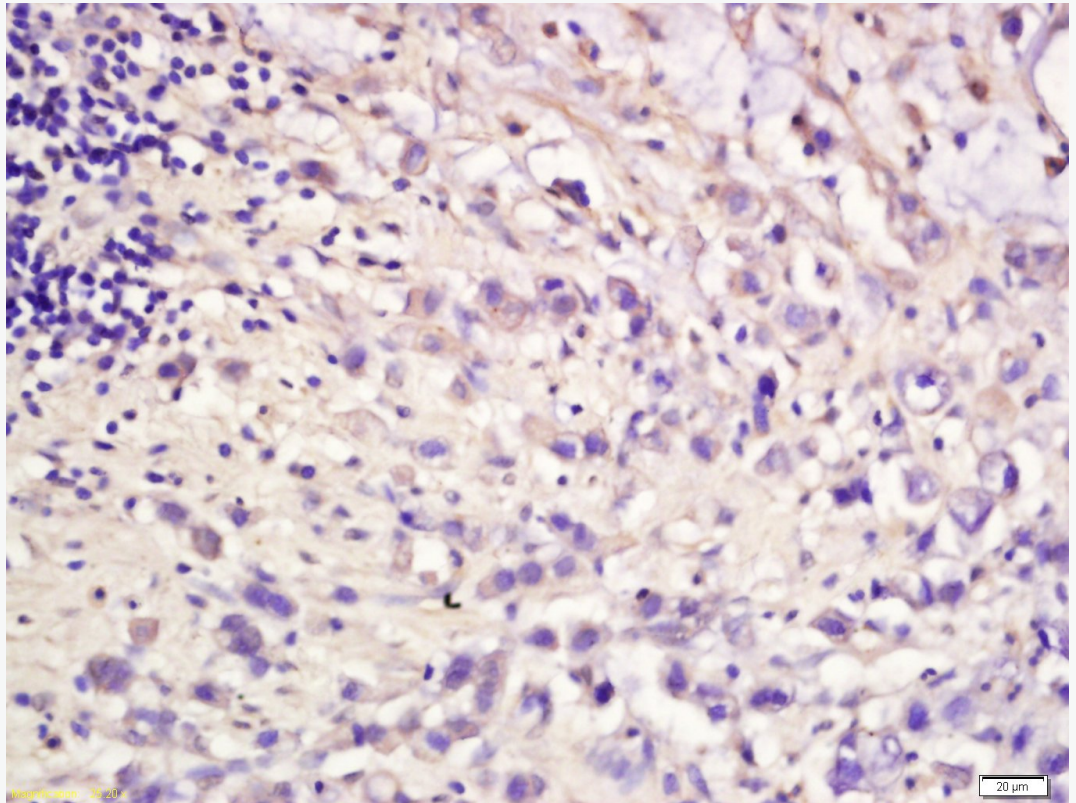
Lane 6: Rat Lung tissue lysates

Primary: Anti-MET (SL0668R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 33/123/153 kDa

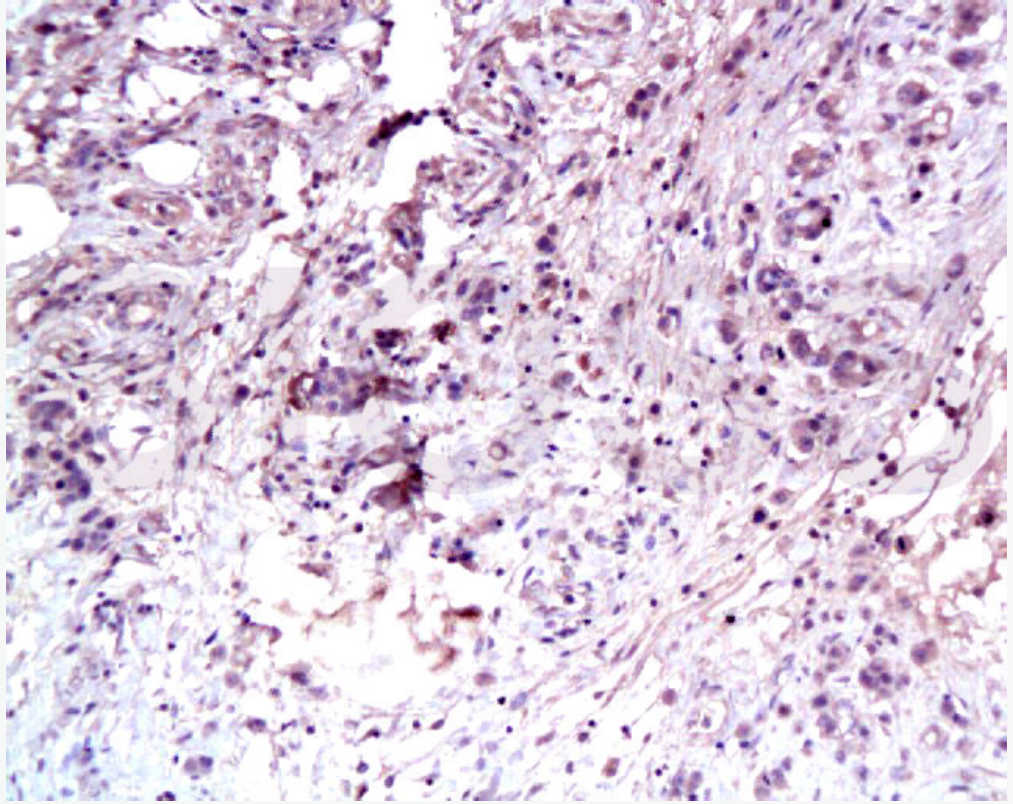
Observed band size: 145 kDa



Tissue/cell:human gastric cancer tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

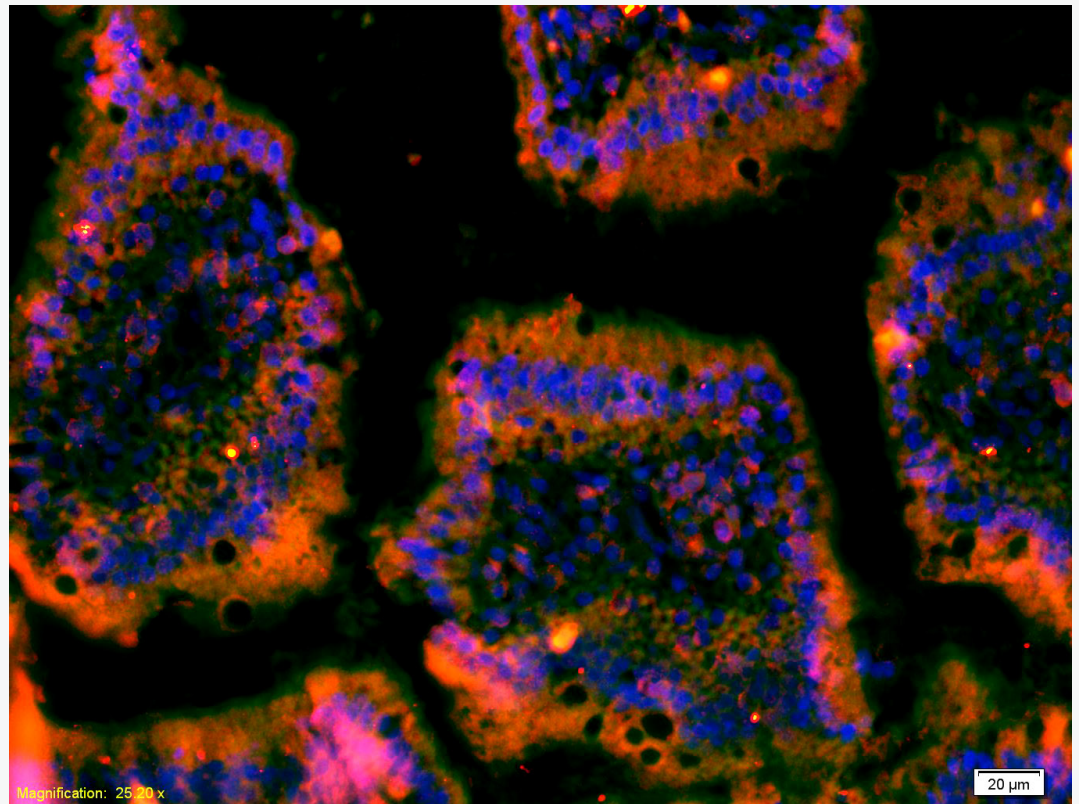
Incubation: Anti-Met (c Met) Polyclonal Antibody, Unconjugated(SL0668R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



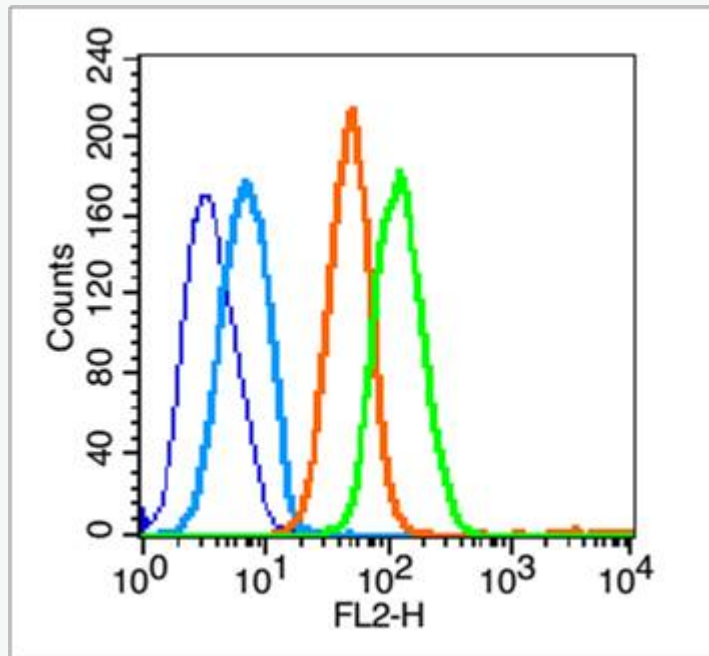
Tissue/cell: human gastric carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-C-Met Polyclonal Antibody, Unconjugated(SL0668R) 1:100, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: mouse intestine tissue;4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Blocking
buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-C-Met Polyclonal Antibody, Unconjugated(SL0668R) 1:200, overnight
at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, Cy3
conjugated(SL0295G-Cy3)used at 1:200 dilution for 40 minutes at 37°C.
DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei



Blank control (blue line): U251(blue).

Primary Antibody (green line): Rabbit Anti-Met (c Met) antibody (SL0668R)

Dilution: $1\mu\text{g} / 10^6$ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE

Dilution: $1\mu\text{g} / \text{test}$.

Protocol

The cells were fixed with 70% ethanol overnight at 4°C. Cells stained with Primary Antibody for 30 min at room temperature. The cells were then incubated in 1 X PBS/2%BSA/10% goat serum to block non-specific protein-protein interactions followed by the antibody for 15 min at room temperature. The secondary antibody used



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for 40 min at room temperature. Acquisition of 20,000 events was performed.