Anti-c-Met Antibody [PSH0-19]

HA721287

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IHC-P, FC
Molecular Wt:	Predicted band size: 156 kDa
Clone number:	PSH0-19

Description: 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. MET is a single pass tyrosine kinase receptor essential for embryonic development, organogenesis and wound healing. Hepatocyte growth factor/Scatter Factor (HGF/SF) and its splicing isoform (NK1, NK2) are the only known ligands of the MET receptor. MET is normally expressed by cells of epithelial origin, while expression of HGF/SF is restricted to cells of mesenchymal origin. When HGF/SF binds its cognate receptor MET it induces its dimerization through a not yet completely understood mechanism leading to its activation. Abnormal MET activation in cancer correlates with poor prognosis, where aberrantly active MET triggers tumor growth, formation of new blood vessels (angiogenesis) that supply the tumor with nutrients, and cancer spread to other organs (metastasis). MET is deregulated in many types of human malignancies, including cancers of kidney, liver, stomach, breast, and brain. Normally, only stem cells and progenitor cells express MET, which allows these cells to grow invasively in order to generate new tissues in an embryo or regenerate damaged tissues in an adult. However, cancer stem cells are thought to hijack the ability of normal stem cells to express MET, and thus become the cause of cancer persistence and spread to other sites in the body. Both the overexpression of Met/HGFR, as well as its autocrine activation by co-expression of its hepatocyte growth factor ligand, have been implicated in oncogenesis. Various mutations in the MET gene are associated with papillary renal carcinoma.

Immunogen: Synthetic peptide within human Met aa 1,341-1,390 / 1,390.

Positive control: A549 cell lysate, HepG2 cell lysate, HT-29 cell lysate, Hela cell lysate, LO2 cell lysate, human lung adenocarcinoma tissue, Hela.

Subcellular location: Membrane; Secreted.

Database links: SwissProt: P08581 Human

Recommended Dilutions:

WB	1:1,000
IHC-P	1:800
FC	1:500-1:1,000

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

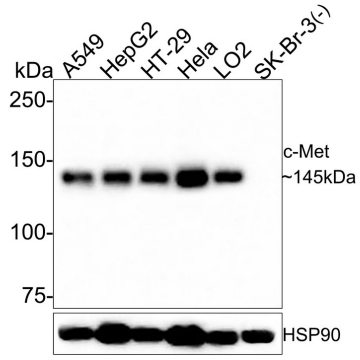

Fig1: Western blot analysis of c-Met on different lysates with Rabbit anti-c-Met antibody (HA721287) at 1/1,000 dilution.

Lane 1: A549 cell lysate
Lane 2: HepG2 cell lysate
Lane 3: HT-29 cell lysate
Lane 4: Hela cell lysate
Lane 5: LO2 cell lysate
Lane 6: SK-Br-3 cell lysate (Negative)

Lysates/proteins at 30 µg/Lane.

Predicted band size: 156 kDa
Observed band size: 145 kDa

Exposure time: 1 minute;

6% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA721287) at 1/1,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:300,000 dilution was used for 1 hour at room temperature.

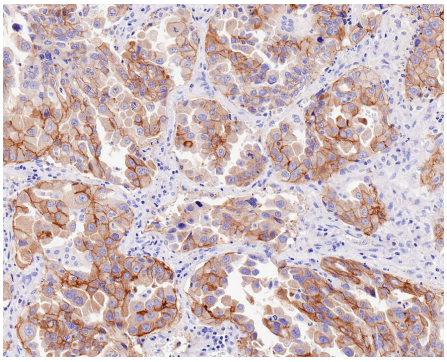

Fig2: Immunohistochemical analysis of paraffin-embedded human lung adenocarcinoma tissue with Rabbit anti-c-Met antibody (HA721287) at 1/800 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA721287) at 1/800 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

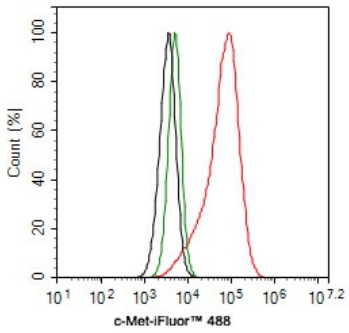

Fig3: Flow cytometric analysis of Hela cells labeling c-Met.

Cells were fixed and permeabilized. Then stained with the primary antibody (HA721287, 1ug/ml) (red) compared with Rabbit IgG Isotype Control (green). After incubation of the primary antibody at +4℃ for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4℃. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Silva Paiva R et al. c-Met expression in renal cell carcinoma with bone metastases. J Bone Oncol. 2020 Sep
2. Fu J et al. HGF/c-MET pathway in cancer: from molecular characterization to clinical evidence. Oncogene. 2021 Jul