

Mouse Monoclonal Antibody to MET

Purified Mouse Monoclonal Antibody Catalog # AO2427a

Specification

Mouse Monoclonal Antibody to MET - Product Information

Application WB, IHC, FC, ICC, E

Primary Accession <u>P08581</u>

Reactivity Human, Monkey

Host Mouse
Clonality Monoclonal
Isotype Mouse IgG1
Calculated MW 155kDa KDa

Description

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.;

Immunogen

Purified recombinant fragment of human MET (AA: 743-932) expressed in E. Coli.

Formulation

Purified antibody in PBS with 0.05% sodium azide

Application Note

ELISA: 1/10000; WB: 1/500 - 1/2000; IHC: 1/200 - 1/1000; ICC: 1/200 - 1/1000; FCM: 1/200 - 1/400

Mouse Monoclonal Antibody to MET - Additional Information

Gene ID 4233

Other Names

HGFR; AUTS9; RCCP2; c-Met; DFNB97

Dilution

WB~~1:1000 IHC~~1:100~500 FC~~1:10~50 ICC~~N/A E~~N/A

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small



aliquots to prevent freeze-thaw cycles.

Precautions

Mouse Monoclonal Antibody to MET is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Monoclonal Antibody to 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).

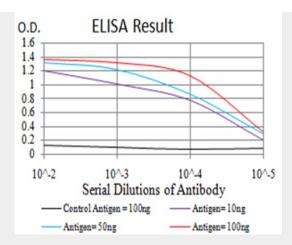
Mouse Monoclonal Antibody to MET - Protocols

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

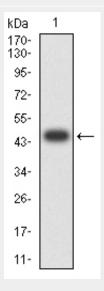
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Mouse Monoclonal Antibody to MET - Images

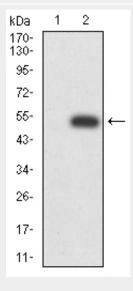




Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)

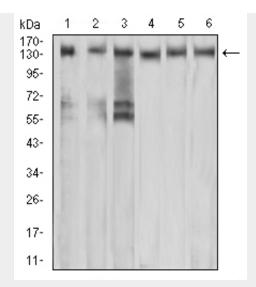


Western blot analysis using MET mAb against human MET (AA: 743-932) recombinant protein. (Expected MW is 51 kDa)

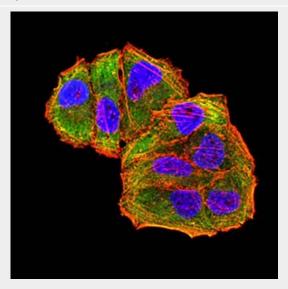


Western blot analysis using MET mAb against HEK293 (1) and MET (AA: 743-932)-hlgGFc transfected HEK293 (2) cell lysate.

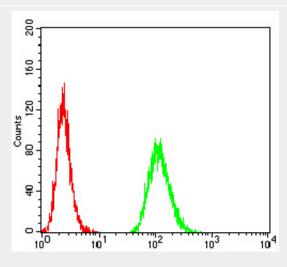




Western blot analysis using MET mouse mAb against A549 (1), COS7 (2), Hela (3), HEK293 (4), HepG2 (5), and A431 (6) cell lysate.



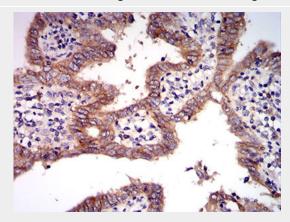
Immunofluorescence analysis of Hela cells using MET mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher







Flow cytometric analysis of MCF-7 cells using MET mouse mAb (green) and negative control (red).



Immunohistochemical analysis of paraffin-embedded endometrial cancer tissues using MET mouse mAb with DAB staining.

Mouse Monoclonal Antibody to MET - References

1.Oncotarget. 2015 Jun 30;6(18):16215-26.; 2.Br J Cancer. 2015 Feb 3;112(3):429-37.;