

Mouse Monoclonal Antibody to MET

Purified Mouse Monoclonal Antibody Catalog # AO2427a

Product Information

Application WB, IHC, FC, ICC, E

Primary Accession P08581

Reactivity Human, Monkey

HostMouseClonalityMonoclonalClone Names5E9C4IsotypeMouse IgG1Calculated MW155541

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

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.

PrecautionsMouse Monoclonal Antibody to MET is for research use only and not for use

in diagnostic or therapeutic procedures.

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.

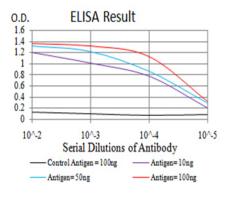
Tissue Location

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).

References

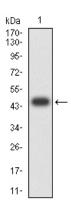
1.Oncotarget. 2015 Jun 30;6(18):16215-26.; 2.Br J Cancer. 2015 Feb 3;112(3):429-37.;

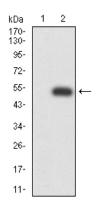
Images



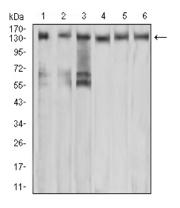
Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)

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

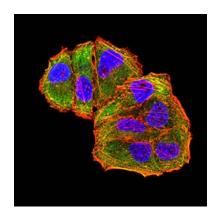




Western blot analysis using MET mAb against HEK293 (1) and MET (AA: 743-932)-hIgGFc transfected HEK293 (2) cell lysate.

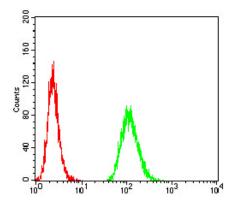


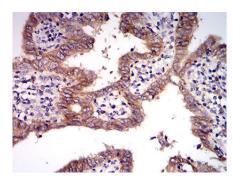
Western blot analysis using MET mouse mAb against A549 (1), COS7 (2), Hela (3), HEK293 (4), HepG2 (5), and A431 (6) cell lysate.



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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.