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Phospho-MET(Y1349) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3167a

Product Information

Application	WB, IHC-P, E
Primary Accession	P08581
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB5215
Calculated MW	155541

Additional Information

Gene ID	4233
Other Names	Hepatocyte growth factor receptor, HGF receptor, HGF/SF receptor, Proto-oncogene c-Met, Scatter factor receptor, SF receptor, Tyrosine-protein kinase Met, MET
Target/Specificity	This MET Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding Y1349 of human MET.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Phospho-MET(Y1349) Antibody 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).

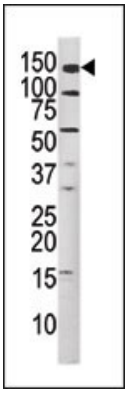
Background

The proto-oncogene MET product is the hepatocyte growth factor receptor and encodes 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. Various mutations in the MET gene are associated with papillary renal carcinoma.

References

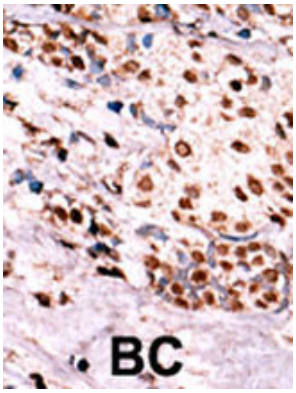
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Chung, J., et al., J. Biol. Chem. 279(31):32287-32293 (2004).
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Images



The anti-MET-Y1349 Pab (Cat. #AP3167a) is used in Western blot to detect MET-Y1349 in mouse kidney tissue lysate.

Formalin-fixed and paraffin-embedded human cancer



tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

Citations

- EGFR signaling through an Akt-SREBP-1-dependent, rapamycin-resistant pathway sensitizes glioblastomas to antilipogenic therapy.
- An LXR agonist promotes glioblastoma cell death through inhibition of an EGFR/AKT/SREBP-1/LDLR-dependent pathway.
- Progression Risk Score Estimation Based on Immunostaining Data in Oral Cancer Using Unsupervised Hierarchical Clustering Analysis: A Retrospective Study in Taiwan

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