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Phospho-MET-Y1003 Antibody Blocking Peptide

Synthetic peptide
Catalog # BP3163a

Specification

Phospho-MET-Y1003 Antibody Blocking Peptide - Product Information

Primary Accession P08581

Phospho-MET-Y1003 Antibody Blocking Peptide - 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
The synthetic peptide sequence used to generate the antibody AP3163a was selected from the region of human Phospho-MET-Y1003. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

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

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Phospho-MET-Y1003 Antibody Blocking Peptide - 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. Promotes also 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).

Phospho-MET-Y1003 Antibody Blocking Peptide - Protocols

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

- Blocking Peptides

Phospho-MET-Y1003 Antibody Blocking Peptide - Images

Phospho-MET-Y1003 Antibody Blocking Peptide - 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.

Phospho-MET-Y1003 Antibody Blocking Peptide - References

Wong, A.S., et al., Exp. Cell Res. 299(1):248-256 (2004).Higuchi, T., et al., Mol. Cell. Biol. 24(17):7456-7468 (2004).Mineo, R., et al., Endocrinology 145(9):4355-4365 (2004).Chung, J., et al., J. Biol. Chem. 279(31):32287-32293 (2004).Fischer, O.M., et al., J. Biol. Chem. 279(28):28970-28978 (2004).