



Mouse Mertk Blocking Peptide (C-term)

Synthetic peptide Catalog # BP21205b

Specification

Mouse Mertk Blocking Peptide (C-term) - Product Information

Primary Accession <u>Q60805</u>

Mouse Mertk Blocking Peptide (C-term) - Additional Information

Gene ID 17289

Other Names

Tyrosine-protein kinase Mer, Proto-oncogene c-Mer, Receptor tyrosine kinase MerTK, Mertk, Mer

Target/Specificity

The synthetic peptide sequence is selected from aa 946-960 of HUMAN Mertk

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.

Mouse Mertk Blocking Peptide (C-term) - Protein Information

Name Mertk

Synonyms Mer

Function

Receptor tyrosine kinase that transduces signals from the extracellular matrix into the cytoplasm by binding to several ligands

Mouse Mertk Blocking Peptide (C-term) - Background

Receptor tyrosine kinase that transduces signals from the extracellular matrix into the cytoplasm by binding to several ligands including LGALS3, TUB, TULP1 or GAS6. Regulates many physiological processes including cell survival, migration, differentiation, and phagocytosis of apoptotic cells (efferocytosis). Ligand binding at the cell surface induces autophosphorylation of MERTK on its intracellular domain that provides docking sites for downstream signaling molecules. Following activation by ligand, interacts with GRB2 or PLCG2 and induces phosphorylation of MAPK1, MAPK2, FAK/PTK2 or RAC1. MERTK signaling plays a role in various processes such as macrophage clearance of apoptotic cells, platelet aggregation, cytoskeleton reorganization and engulfment. Functions in the retinal pigment epithelium (RPE) as a regulator of rod outer segments fragments phagocytosis. Plays also an important role in inhibition of Toll-like receptors (TLRs)-mediated innate immune response by activating STAT1, which selectively induces production of suppressors of cytokine signaling SOCS1 and SOCS3.

Mouse Mertk Blocking Peptide (C-term) - References

Graham D.K.,et al.Oncogene 10:2349-2359(1995).
Dowds C.A.,et al.Submitted (JAN-1996) to the EMBL/GenBank/DDBJ databases.
Lu Q.,et al.Nature 398:723-728(1999).
Georgescu M.M.,et al.Mol. Cell. Biol. 19:1171-1181(1999).
Behrens E.M.,et al.Eur. J. Immunol. 33:2160-2167(2003).



including LGALS3, TUB, TULP1 or GAS6. Regulates many physiological processes including cell survival, migration, differentiation, and phagocytosis of apoptotic cells (efferocytosis). Ligand binding at the cell surface induces autophosphorylation of MERTK on its intracellular domain that provides docking sites for downstream signaling molecules. Following activation by ligand, interacts with GRB2 or PLCG2 and induces phosphorylation of MAPK1, MAPK2, FAK/PTK2 or RAC1. MERTK signaling plays a role in various processes such as macrophage clearance of apoptotic cells, platelet aggregation, cytoskeleton reorganization and engulfment. Functions in the retinal pigment epithelium (RPE) as a regulator of rod outer segments fragments phagocytosis. Plays also an important role in inhibition of Toll-like receptors (TLRs)-mediated innate immune response by activating STAT1, which selectively induces production of suppressors of cytokine signaling SOCS1 and SOCS3.

Cellular Location

Membrane; Single-pass type I membrane protein

Tissue Location

Expressed predominantly in the hematopoietic lineages: macrophages, NK cells, NKT cells, dendritic cells and platelets.

Mouse Mertk Blocking Peptide (C-term) - Protocols

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

• Blocking Peptides