10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Mouse Mertk Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21205b

Product Information

Application	WB, E
Primary Accession	Q60805
Reactivity	Mouse, Rat
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB50416
Calculated MW	110157

Additional Information

Gene ID	17289
Other Names	Tyrosine-protein kinase Mer, Proto-oncogene c-Mer, Receptor tyrosine kinase MerTK, Mertk, Mer
Target/Specificity	This Mouse Mertk antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 946-980 amino acids from the C-terminal region of mouse Mertk.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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	Mouse Mertk Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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 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. Also plays 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	Cell membrane {ECO:0000250|UniProtKB:Q12866}; Single-pass type I membrane protein
Tissue Location	Expressed predominantly in the hematopoietic lineages: macrophages, NK cells, NKT cells, dendritic cells and platelets.

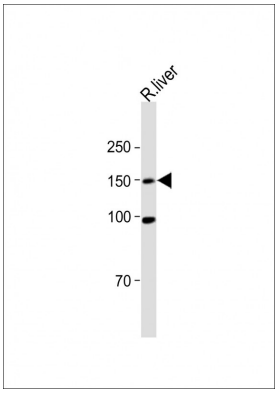
Background

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.

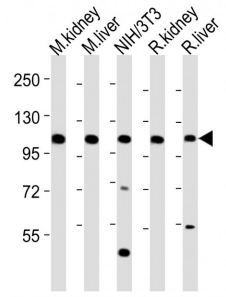
References

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).

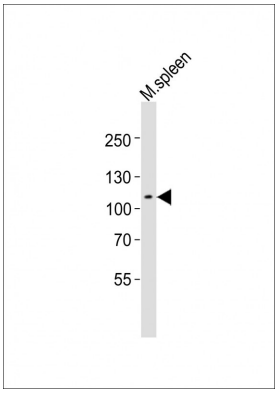
Images



All lanes: Anti-Mouse Mertk Antibody (C-term) at 1:1000 dilution + Rat liver lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 150 KDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes : Anti-Mertk Antibody (C-term) at 1:2000 dilution Lane 1: mouse kidney lysates Lane 2: mouse liver lysates Lane 3: NIH/3T3 whole cell lysates Lane 4: rat kidney lysates Lane 5: rat liver lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 110 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Anti-Mertk Antibody (C-term) at 1:1000 dilution + mouse spleen lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 110 kDa Blocking/Dilution buffer: 5% NFDM/TBST.