

Mouse Mertk Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5501

Product Information

Application	WB
Primary Accession	<u>Q60805</u>
Reactivity	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	110157
Isotype	Rabbit IgG
Antigen Source	HUMAN

Additional Information

Gene ID	17289
Antigen Region	946-980
Other Names	Tyrosine-protein kinase Mer, Proto-oncogene c-Mer, Receptor tyrosine kinase MerTK, Mertk, Mer
Dilution	WB~~1:1000
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.
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	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-Mertk Antibody (C-term) at 1:1000 dilution Lane 1: mouse kidney lysates Lane 2: mouse liver lysates Lane 3: rat kidney lysates Lane 4: 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.



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