

Anti-MerTK antibody



Description	Mouse monoclonal to MerTK.
Model	STJ98242
Host	Mouse
Reactivity	Human
Applications	ELISA, WB
Immunogen	Purified recombinant fragment of MerTK expressed in E. Coli.
Gene ID	10461
Gene Symbol	MERTK
Dilution range	WB 1:500-1:2000ELISA 1:10000
Specificity	MerTK Monoclonal Antibody detects endogenous levels of MerTK protein.
Tissue Specificity	Not expressed in normal B- and T-lymphocytes but is expressed in numerous neoplastic B- and T-cell lines. Highly expressed in testis, ovary, prostate, lung, and kidney, with lower expression in spleen, small intestine, colon, and liver.
Purification	Affinity purification
Clone ID	7E5G1
Note	For Research Use Only (RUO).
Protein Name	Tyrosine-protein kinase Mer Proto-oncogene c-Mer Receptor tyrosine kinase MerTK
Clonality	Monoclonal

Conjugation	Unconjugated
Isotype	IgG1
Formulation	Ascitic fluid containing 0.03% sodium azide.
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:7027OMIM:604705
Alternative Names	Tyrosine-protein kinase Mer Proto-oncogene c-Mer Receptor tyrosine kinase MerTK
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. 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 Localization	Membrane
Post-translational Modifications	Autophosphorylated on Tyr-749, Tyr-753 and Tyr-754 in the activation loop allowing full activity. Autophosphorylated on Tyr-872 leading to recruitment of downstream partners of the signaling cascade such as PLCG2 .