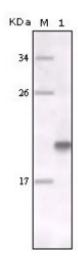
## Anti-MerTK antibody



**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 <u>HGNC:7027OMIM:604705</u>

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 (offerentiation). Ligand hinding at the cell surface induces system combandation

(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.

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