

Anti-Mer Antibody
Catalog # ABO11585**Specification**

Anti-Mer Antibody - Product Information

Application	WB
Primary Accession	Q12866
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Tyrosine-protein kinase Mer(MERTK) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Mer Antibody - Additional Information

Gene ID 10461

Other Names

Tyrosine-protein kinase Mer, 2.7.10.1, Proto-oncogene c-Mer, Receptor tyrosine kinase MerTK, MERTK, MER

Calculated MW

110249 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Membrane ; Single-pass type I membrane 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.

Protein Name

Tyrosine-protein kinase Mer

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human MERTK(132-148aa KDGKELLGAHHAITQFY), different from the related mouse and rat sequences by one amino acid.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the protein kinase superfamily. Tyr protein kinase family. AXL/UFO subfamily.

Anti-Mer Antibody - 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 (PubMed: [32640697](http://www.uniprot.org/citations/32640697)). 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; Single-pass type I membrane protein

Tissue Location

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

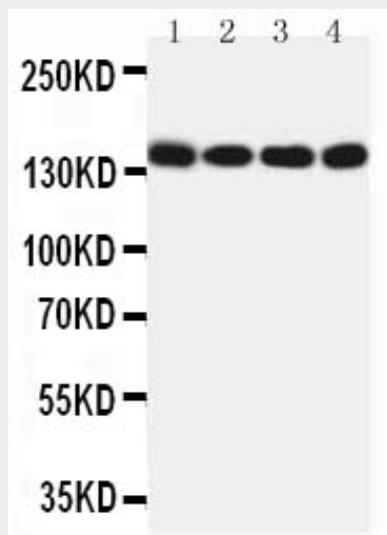
Anti-Mer Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Mer Antibody - Images



Anti-MERTK antibody, ABO11585, All Western blotting
All lanes: Anti-MERTK(ABO11585) at 0.5ug/ml
Lane 1: HELA Whole Cell Lysate at 40ug
Lane 2: A549 Whole Cell Lysate at 40ug
Lane 3: NIH Whole Cell Lysate at 40ug
Lane 4: 22RV1 Whole Cell Lysate at 40ug
Predicted bind size: 110KD
Observed bind size: 140KD

Anti-Mer Antibody - Background

Proto-oncogene tyrosine-protein kinase MER, also called MERTK is an enzyme that in humans is encoded by the MERTK gene. This gene is a member of the MER/AXL/TYRO3 receptor kinase family and encodes a transmembrane protein with two fibronectin type-III domains, two Ig-like C2-type(immunoglobulin-like) domains, and one tyrosine kinase domain. This gene is mapped to 2q13. MERTK signaling plays a role in various processes such as macrophage clearance of apoptotic cells, platelet aggregation, cytoskeleton reorganization and engulfment. This gene is also very important 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.