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

# MER / MERTK Antibody (C-Terminus)

**Goat Polyclonal Antibody**
**Catalog # ALS13420**

## Specification

### MER / MERTK Antibody (C-Terminus) - Product Information

| | |
|---|---|
| Application | **IHC** |
| Primary Accession | Q12866 |
| Reactivity | **Human** |
| Host | **Goat** |
| Clonality | **Polyclonal** |
| Calculated MW | **110kDa KDa** |

### MER / MERTK Antibody (C-Terminus) - 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

**Target/Specificity**
Human MERTK.

**Reconstitution & Storage**
Store at -20°C. Minimize freezing and thawing.

**Precautions**
MER / MERTK Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

### MER / MERTK Antibody (C-Terminus) - 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:<a href="http://www.uniprot.org/citations/32640697" target="_blank">32640697</a>). 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

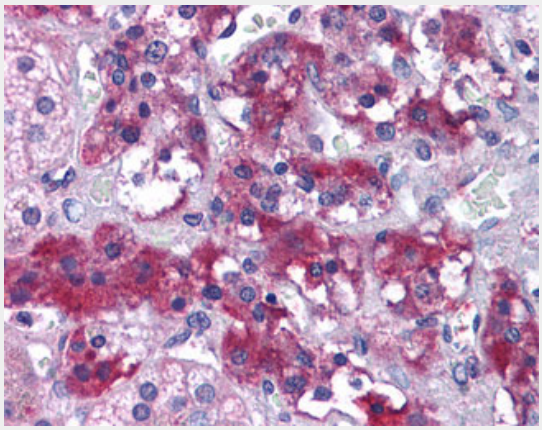
**Tissue Location**
Not expressed in normal B- and T-lymphocytes but is expressed in numerous neoplastic B- and T-cell lines. Highly expressed in testis, ovary, prostate, lung, and kidney, with lower expression in spleen, small intestine, colon, and liver

## MER / MERTK Antibody (C-Terminus) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## MER / MERTK Antibody (C-Terminus) - Images



Anti-MERTK antibody IHC of human adrenal.

## MER / MERTK Antibody (C-Terminus) - 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.

**MER / MERTK Antibody (C-Terminus) - References**

Graham D.K.,et al.Cell Growth Differ. 5:647-657(1994).
Graham D.K.,et al.Cell Growth Differ. 5:1022-1022(1994).
Gal A.,et al.Nat. Genet. 26:270-271(2000).
Hillier L.W.,et al.Nature 434:724-731(2005).
Ling L.,et al.J. Biol. Chem. 271:18355-18362(1996).