

# Anti-MERTK/TYRO3 (pY749/681) Antibody

Rabbit polyclonal antibody to MERTK/TYRO3 (pY749/681) Catalog # AP60865

#### **Product Information**

**Application** WB, IHC

 Primary Accession
 Q12866, Q06418

 Other Accession
 Q60805, P55144

**Reactivity** Human, Mouse, Rat, Zebrafish, Chicken

Host Rabbit
Clonality Polyclonal
Calculated MW 110249

### **Additional Information**

**Gene ID** 10461

Other Names MERTK; MER; Tyrosine-protein kinase Mer; Proto-oncogene c-Mer; Receptor

tyrosine kinase MerTK; TYRO3; BYK; DTK; RSE; SKY; Tyrosine-protein kinase receptor TYRO3; Tyrosine-protein kinase DTK; Tyrosine-protein kinase RSE;

Tyrosine-protein kinase SKY; Tyrosine-protein kinase byk

**Target/Specificity** Recognizes endogenous levels of MERTK/TYRO3 (pY749/681) protein.

**Dilution** WB~~WB (1/500 - 1/2000), IHC (1/50 - 1/200) IHC~~WB (1/500 - 1/2000), IHC

(1/50 - 1/200)

**Format** Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

**Storage** Store at -20 °C.Stable for 12 months from date of receipt

#### **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). 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

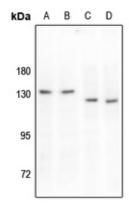
**Tissue Location** 

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

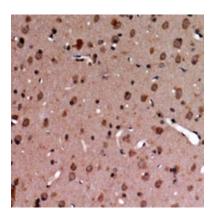
# **Background**

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human TYRO3/MERTK. The exact sequence is proprietary.

## **Images**



Western blot analysis of MERTK/TYRO3 (pY749/681) expression in A549 (A), U87MG (B), mouse brain (C), rat brain (D) whole cell lysates.



Immunohistochemical analysis of MERTK/TYRO3 (pY749/681) staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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