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Anti-MERTK/TYRO3 (Phospho-Y749/681) Antibody

Catalog # AP60865

Product Information

Application	WB, IHC
Primary Accession	Q12866
Other Accession	Q06418
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	KLH-conjugated synthetic phosphopeptide corresponding to residues surrounding Y749/681 of human MERTK/TYRO3 protein. The exact sequence is proprietary.
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 0.01% 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.

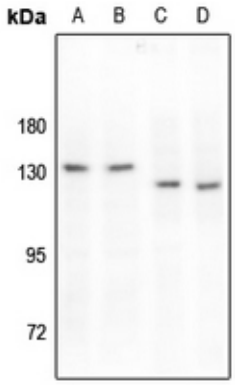
Cellular Location

Cell membrane; Single-pass type I membrane protein

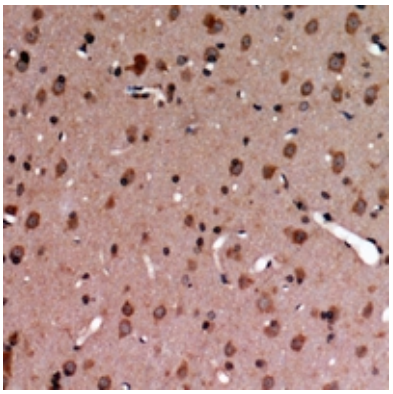
Tissue Location

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

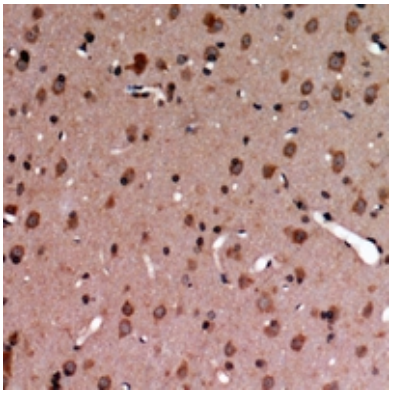
Images



Western blot analysis of MERTK/TYRO3 (Phospho-Y749/681) expression in A549 (A), U87MG (B), mouse brain (C), rat brain (D) whole cell lysates. (Predicted band size: 110; 96 kD; Observed band size: 130; 120 kD)



Immunohistochemical analysis of MERTK/TYRO3 (Phospho-Y749/681) 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.



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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.