ARG10784
anti-MERTK antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes MERTK
Tested Reactivity	Hu, Ms, Rat
Tested Application	Confocal, ELISA, FACS, ICC/IF, IHC-P, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	MERTK
Species	Human
Immunogen	Synthetic peptide taken within aa. 100-200 from MERTK protein.
Conjugation	Un-conjugated
Alternate Names	c-mer; Receptor tyrosine kinase MerTK; c-Eyk; Tyro12; MER; RP38; EC 2.7.10.1; Proto-oncogene c-Mer; Tyrosine-protein kinase Mer

Application Instructions

Application table

Application	Dilution
Confocal	Assay-dependent
ELISA	1:10000
FACS	Assay-dependent
ICC/IF	1:200
IHC-P	Assay-dependent
IP	1:200
WB	1:750

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Observed Size	~ 175 kDa

Properties

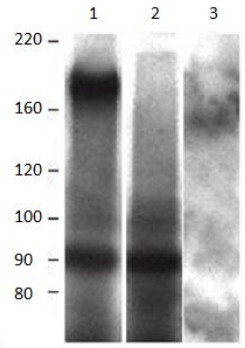
Form	Liquid
Purification	Affinity purified.
Buffer	Tris-Glycine Buffer (pH 7.4 - 7.8), Hepes, 0.02% Sodium azide, 30% Glycerol and 0.5% BSA.
Preservative	0.02% Sodium azide

Stabilizer	30% Glycerol and 0.5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

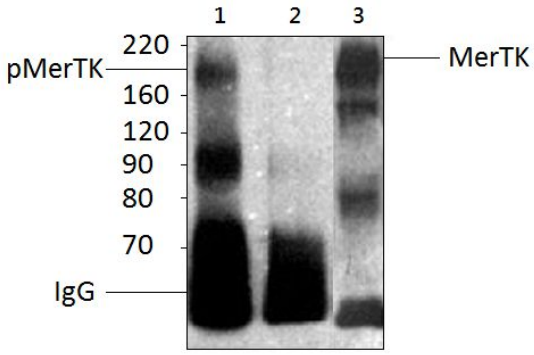
Gene Symbol	MERTK
Gene Full Name	MER proto-oncogene, tyrosine kinase
Background	This gene is a member of the MER/AXL/TYRO3 receptor kinase family and encodes a transmembrane protein with two fibronectin type-III domains, two Ig-like C2-type (immunoglobulin-like) domains, and one tyrosine kinase domain. Mutations in this gene have been associated with disruption of the retinal pigment epithelium (RPE) phagocytosis pathway and onset of autosomal recessive retinitis pigmentosa (RP). [provided by RefSeq, Jul 2008]
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. 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. [UniProt]
Calculated Mw	110 kDa
PTM	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 (By similarity).

Images



ARG10784 anti-MERTK antibody WB image

Western blot: MERTK from 1) Long Evans (LE) and 2) RCS (MERTK-deficient) Rat testis. 3) Immunodepleted sample of Lane 2 with MERTK blocking peptide. The blots were stained with ARG10784 anti-MERTK antibody. (~ 174 kDa).



ARG10784 anti-MERTK antibody WB image

Western blot: 1) Phosphorylated, and 2,3) non-phosphorylated MERTK was immunoprecipitated with ARG10784 anti-MERTK antibody and stained with ARG10816 anti-Phospho-MERTK antibody. MW of MERTK is 174 kDa. Lower broad band is IgG from immunoprecipitation.