

Rabbit Anti-MERTK antibody

SL0548R

Product Name	MERTK
Chinese Name	c-mer 原癌基因酪氨酸激酶抗体
Alias	MERTK_HUMAN; Tyrosine-protein kinase Mer; Proto-oncogene c-Mer; Receptor tyrosine kinase MerTK; MER; MER proto-oncogene, tyrosine kinase; RP38; c-Eyk; c-mer; Tyro12.
Research Area	Tumour
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human, (predicted: Mouse, Rat,)
Applications	ELISA=1:5000-10000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	108kDa
Cellular localization	The cell membrane
Form	Liquid
Concentration immunogen	1mg/ml KLH conjugated synthetic peptide derived from human C-Mer: 501-600/994
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed
Product Detail	The Major Facilitator Superfamily (MFS) is a large and diverse group of secondary transporters that includes uniporters, symporters, and antiporters. MFS proteins facilitate the transport across cytoplasmic or internal

membranes of a variety of substrates including ions, sugar phosphates, drugs, neurotransmitters, nucleosides, amino acids, and peptides. They do so using the electrochemical potential of the transported substrates. Uniporters transport a single substrate, while symporters and antiporters transport two substrates in the same or in opposite directions, respectively, across membranes. Peptide-transporters 2 [solute carrier family 15 (H⁺/peptide transporter), member 2; SLC15A2; PEPT2 ; Oligopeptide transporter, kidney isoform ; Kidney H⁽⁺⁾/peptide cotransporter;].

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.

Subunit:

Interacts (upon activation) with TNK2; stimulates TNK2 autophosphorylation. Interacts (via N-terminus) with extracellular ligands LGALS3, TUB, TULP1 and GAS6. Interacts with VAV1 in a phosphotyrosine-independent manner.

Subcellular Location:

Membrane; Single-pass type I membrane protein.

Tissue Specificity:

Expressed predominantly in the hematopoietic lineages: macrophages, NK cells, NKT cells, dendritic cells and platelets.

Post-translational modifications:

Autophosphorylated on Tyr-744, Tyr-748 and Tyr-749 in the activation loop allowing full activity. Autophosphorylated on Tyr-867 leading to recruitment of downstream partners of the signaling cascade such as PLCG2.

Similarity:

Belongs to the protein kinase superfamily. Tyr protein kinase family.

AXL/UFO subfamily.

Contains 2 fibronectin type-III domains.

Contains 2 Ig-like C2-type (immunoglobulin-like) domains.

Contains 1 protein kinase domain.

SWISS:

Q12866

Gene ID:

10461

Database links:

[Entrez Gene: 10461](#) Human

[Omim: 604705](#) Human

[SwissProt: Q12866](#) Human

[Unigene: 306178](#) Human

主要用于 Tumour 方面的研究