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KD-Validated Anti-MERTK Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1046

Specification

KD-Validated Anti-MERTK Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	Q12866
Reactivity	**Human**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 110 kDa , observed, 188 kDa KDa**
Gene Name	**MERTK**
Aliases	**MERTK; MER Proto-Oncogene, Tyrosine Kinase; RP38; MER; C-Mer Proto-Oncogene Tyrosine Kinase; Receptor Tyrosine Kinase MerTK; Tyrosine-Protein Kinase Mer; Proto-Oncogene C-Mer; EC 2.7.10.1; Tyro12; C-Eyk; MER Receptor Tyrosine Kinase; STK Kinase; EC 2.7.10; TYRO12; C-Mer; C-EYK; Mer**
Immunogen	**A synthesized peptide derived from human MERTK**

KD-Validated Anti-MERTK Rabbit Monoclonal Antibody - 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

KD-Validated Anti-MERTK Rabbit Monoclonal Antibody - 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). 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

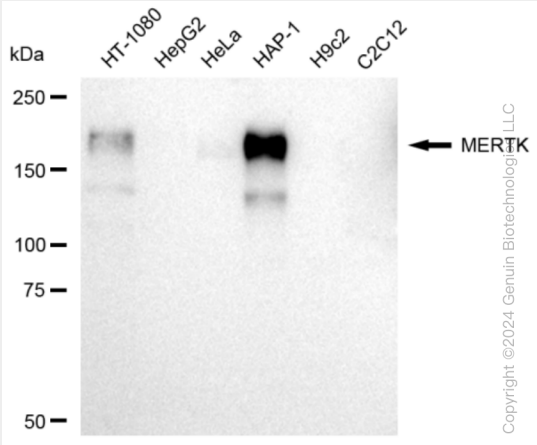
Tissue Location
Not expressed in normal B- and T-lymphocytes but is expressed in numerous neoplastic B- and T-cell lines. Highly expressed in testis, ovary, prostate, lung, and kidney, with lower expression in spleen, small intestine, colon, and liver

KD-Validated Anti-MERTK Rabbit Monoclonal Antibody - 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

KD-Validated Anti-MERTK Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-MERTK antibody (Cat#61164). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-MERTK antibody (Cat#61164, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQ™ ECL Substrate Kit (Cat#226). MERTK, MER proto-oncogene, tyrosine kinase.

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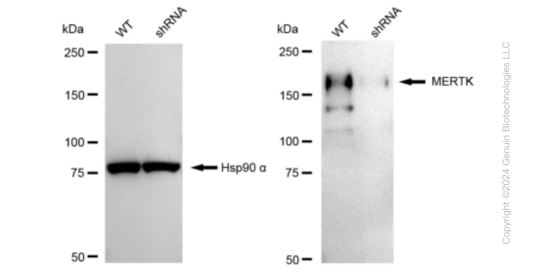
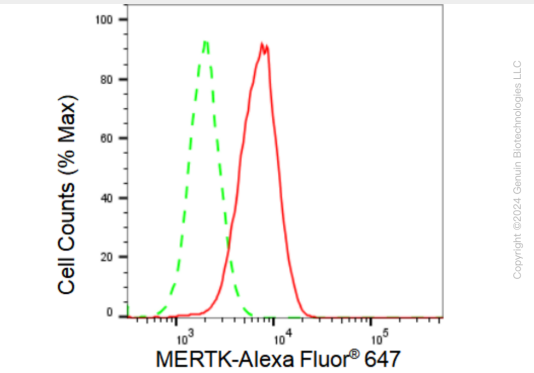
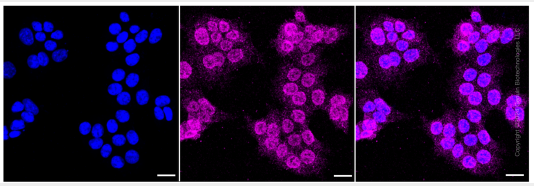


Western blotting analysis using anti-MERTK antibody (Cat#61164). MERTK expression in wild type (WT) and MERTK shRNA knockdown (KD) HT-1080 cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-MERTK antibody (Cat#61164, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQ™ ECL Substrate Kit (Cat#226).



Flow cytometric analysis of MERTK expression in HAP-1 cells using MERTK antibody (Cat#61164, 1:2,000). Green, isotype control; red, MERTK.



Immunocytochemical staining of HAP-1 cells with MERTK antibody (Cat#61164, 1:1,000). Nuclei were stained blue with DAPI; MERTK was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.