M Mlkl Antibody (C-term)
Peptide Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14272B

Specification

M Mlkl Antibody (C-term) - Product Information

Application WB,E
Primary Accession Q9D2Y4
Other Accession NP_083281.1
Reactivity Mouse
Host Rabbit
Clonality Polyclonal
Isotype Rabbit Ig
Antigen Region 444-472

M Mlkl Antibody (C-term) - Additional Information

Gene ID 74568

Other Names
Mixed lineage kinase domain-like protein, Mlkl {ECO:0000312|EMBL:AAH237551, ECO:0000312|MGI:MGI:1921818}

Target/Specificity
This Mouse Mlkl antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 444-472 amino acids from the C-terminal region of mouse Mlkl.

Dilution WB~1:1000

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions M Mlkl Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

M Mlkl Antibody (C-term) - Protein Information

Name Mlkl {ECO:0000312|EMBL:AAH23755.1,

Mouse Mlkl Antibody (C-term) (Cat. #AP14272b) western blot analysis in mouse NIH-3T3 cell line lysates (35ug/lane). This demonstrates the Mlkl antibody detected the Mlkl protein (arrow).

All lanes : Anti-Mlkl Antibody (C-term) at 1:2000 dilution Lane 1: mouse lung lysates Lane 2: NIH/3T3 whole cell lysates Lane 3: mouse liver lysates Lane 4: mouse testis whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 54 kDa Blocking/Dilution buffer: 5% NFDM/TBST.
ECO:0000312|MGI:MGI:1921818

Function
Pseudokinase that plays a key role in TNF-induced necroptosis, a programmed cell death process. Activated following phosphorylation by RIPK3, leading to homotrimerization, localization to the plasma membrane and execution of programmed necrosis characterized by calcium influx and plasma membrane damage. Does not have protein kinase activity (PubMed:<a href="http://www.uniprot.org/citations/23835476" target="_blank">23835476</a>, PubMed:<a href="http://www.uniprot.org/citations/24012422" target="_blank">24012422</a>, PubMed:<a href="http://www.uniprot.org/citations/24019532" target="_blank">24019532</a>). Binds to highly phosphorylated inositol phosphates such as inositolhexakisphosphate (InsP6) which is essential for its necrototic function (By similarity).

Cellular Location
Cytoplasm {ECO:0000250|UniProtKB:Q8NB16}. Cell membrane {ECO:0000250|UniProtKB:Q8NB16}. Note=Localizes to the cytoplasm and translocates to the plasma membrane on necroptosis induction.

Tissue Location
Highly expressed in thymus, colon, intestine, liver, spleen and lung. Expressed at much lower level in skeletal muscle, heart and kidney. Not detected in brain

M Mlkl Antibody (C-term) - Protocols
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytometry
- Cell Culture

Anti-Mlkl Antibody (C-term) at 1:1000 dilution + mouse lung lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 54 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

All lanes : Anti-Mlkl Antibody (C-term) at 1:2000 dilution Lane 1: NIH/3T3 whole cell lysates Lane 2: mouse spleen lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 54 kDa Blocking/Dilution buffer: 5% NFDM/TBST.
All lanes : Anti-Mlkl Antibody (C-term) at 1:2000 dilution Lane 1: mouse testis lysates Lane 2: mouse liver lysates Lane 3: NIH/3T3 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 54 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Western blot analysis of lysate from mouse spleen tissue lysate, using Mouse Mlkl Antibody (C-term)(Cat. #AP14272b). AP14272b was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.
Western blot analysis of lysate from mouse lung tissue lysate, using Mlkl Antibody (C-term)(Cat. #AP14272b). AP14272b was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.

Western blot analysis of lysate from mouse lung tissue lysate, using Mouse Mlkl Antibody (C-term)(Cat. #AP14272b). AP14272b was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.
Western blot analysis of lysate from mouse lung tissue lysate, using Mouse Mlkl Antibody (C-term)(Cat. #AP14272b). AP14272b was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.

M Mlkl Antibody (C-term) - Background

The protein kinase domain is predicted to be catalytically inactive. Molecular function: protein binding. There are two isoforms.

M Mlkl Antibody (C-term) - References


M Mlkl Antibody (C-term) - Citations

- Beclin 1 functions as a negative modulator of MLKL oligomerisation by integrating into the necosome complex.
- Crucial Roles of the RIP Homotypic Interaction Motifs of RIPK3 in RIPK1-Dependent Cell Death and Lymphoproliferative Disease.
- Ubiquitination of RIPK1 suppresses programmed cell death by regulating RIPK1 kinase activation during embryogenesis.
- Shifting the balance of autophagy and proteasome activation reduces proteotoxic cell death: a novel therapeutic approach for restoring photoreceptor homeostasis.
- Flotillin-mediated endocytosis and ALIX-syntenin-1-mediated exocytosis protect the cell membrane from damage caused by necroptosis.
- Oncolysis with DTT-205 and DTT-304 generates immunological memory in cured animals.
- Kinase domain dimerization drives RIPK3-dependent necroptosis.
- HECTD3 mediates TRAF3 polyubiquitination and type I interferon induction during bacterial infection.
- Pretreatment of Huaiqihuang extractum protects against cisplatin-induced nephrotoxicity.
- RIP kinase 1-dependent endothelial necroptosis underlies systemic inflammatory response syndrome.
- Phenytoin inhibits necroptosis.
- Generation and Use of Chimeric RIP Kinase Molecules to Study Necroptosis.
- Embryonic Lethality and Host Immunity of RelA-Deficient Mice Are Mediated by Both Apoptosis and Necroptosis.
- RIPK1-RIPK3-MLKL-dependent necrosis promotes the aging of mouse male reproductive system.
- Nucleotide-binding oligomerization domain (NOD) signaling defects and cell death susceptibility cannot be uncoupled in X-linked inhibitor of apoptosis (XIAP)-driven inflammatory disease.
- Regulation of NKT cell-mediated immune responses to tumours and liver inflammation by mitochondrial PGAM5-Drp1 signalling.
- Necroptosis is preceded by nuclear translocation of the signaling proteins that induce it.
- Characterization of RIPK3-mediated phosphorylation of the activation loop of MLKL during necroptosis.
- RIP1 suppresses innate immune necrotic as well as apoptotic cell death during mammalian parturition.
- Toll-like receptor 3-mediated necrosis via TRIF, RIP3, and MLKL.