

#### MIkl Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5609

## **Specification**

### MIkl Antibody (C-term) - Product Information

WB,E Application **Primary Accession 09D2Y4** Reactivity Mouse **Rabbit** Host Clonality **Polyclonal** Calculated MW M=54,53 KDa Isotype Rabbit IgG **Antigen Source HUMAN** 

#### MIkl Antibody (C-term) - Additional Information

**Gene ID 74568** 

**Antigen Region** 

444-472

#### **Other Names**

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

#### **Dilution**

WB~~0.25

## **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.

### **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**

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

#### MIkl Antibody (C-term) - Protein Information

Name Mlkl {ECO:0000303|PubMed:23835476, ECO:0000312|MGI:MGI:1921818}

#### **Function**

Pseudokinase that plays a key role in TNF-induced necroptosis, a programmed cell death process (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>, PubMed:<a href="http://www.uniprot.org/citations/27321907" target="\_blank">27321907</a>, PubMed:<a href="http://www.uniprot.org/citations/32200799" target="\_blank">32200799</a>, PubMed:<a href="http://www.uniprot.org/citations/32200799" target="\_blank">32200799</a>, PubMed:<a href="http://www.uniprot.org/citations/32296175" target="blank">32296175</a>). Does not have protein kinase activity (PubMed:<a href="http://www.uniprot.org/citations/24012422" target=" blank">24012422</a>). 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 (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>, PubMed:<a href="http://www.uniprot.org/citations/27321907" target=" blank">27321907</a>). In addition to TNF-induced necroptosis, necroptosis can also take place in the nucleus in response to orthomyxoviruses infection: following ZBP1 activation, which senses double-stranded Z-RNA structures, nuclear RIPK3 catalyzes phosphorylation and activation of MLKL, promoting disruption of the nuclear envelope and leakage of cellular DNA into the cytosol (PubMed: <a href="http://www.uniprot.org/citations/32200799" target=" blank">32200799</a>, PubMed:<a href="http://www.uniprot.org/citations/32296175" target=" blank">32296175</a>). Binds to highly phosphorylated inositol phosphates such as inositolhexakisphosphate (InsP6) which is essential for its necroptotic function (By similarity).

#### **Cellular Location**

Cytoplasm. Cell membrane. Nucleus. Note=Localizes to the cytoplasm and translocates to the plasma membrane on necroptosis induction (By similarity). Localizes to the nucleus in response to orthomyxoviruses infection (PubMed:32200799). {ECO:0000250|UniProtKB:Q8NB16, ECO:0000269|PubMed:32200799}

#### **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

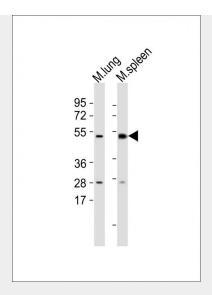
### MIkl Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

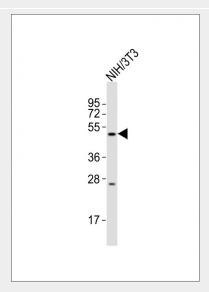
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## MIkl Antibody (C-term) - Images



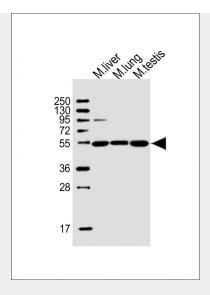


All lanes: Anti-Mlkl Antibody (C-term) at 1:1000 dilution Lane 1: mouse lung lysates Lane 2: mouse spleen lysates Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size: 54 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Anti-Mlkl Antibody (C-term)at 1:2000 dilution + NIH/3T3 whole cell lysates Lysates/proteins at 20  $\mu$ g 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 liver lysate Lane 2: mouse lung lysate Lane 3: mouse testis lysate Lysates/proteins at 20  $\mu$ g 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.

# MIkl Antibody (C-term) - Background

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

## MIkl Antibody (C-term) - References

Bisson, N., et al. Cell Cycle 7(7):909-916(2008)