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Mlkl Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5609

Product Information

Application	WB
Primary Accession	Q9D2Y4
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54317
Isotype	Rabbit IgG
Antigen Source	HUMAN

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

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:23835476, PubMed:24012422, PubMed:24019532, PubMed:27321907, PubMed:32200799,

PubMed:32296175). Does not have protein kinase activity (PubMed:24012422). 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:23835476, PubMed:24012422, PubMed:24019532, PubMed:27321907). 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:32200799, PubMed:32296175). 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

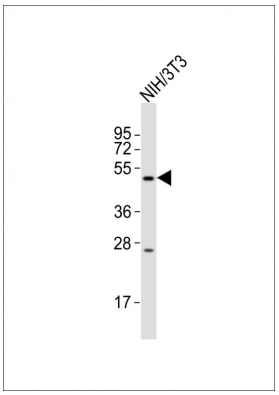
Background

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

References

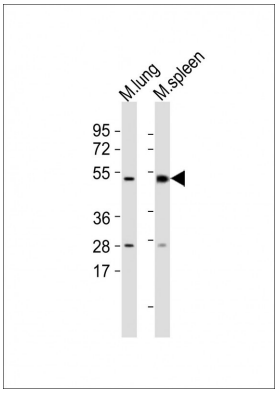
Bisson, N., et al. Cell Cycle 7(7):909-916(2008)

Images



Anti-Mlkl Antibody (C-term)at 1:2000 dilution + 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.

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 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.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.