

MLKL Antibody

Rabbit mAb Catalog # AP92641

Product Information

Application WB, IP **Primary Accession Q8NB16**

Reactivity Rat, Human, Mouse

Clonality Monoclonal

Other Names hMLKL; Mixed lineage kinase domain like; Mlkl;

Isotype Rabbit IgG Host Rabbit 54479 Calculated MW

Additional Information

Dilution WB 1:500~1:2000 IP 1:50 **Purification** Affinity-chromatography

Immunogen A synthesized peptide derived from MLKL

Pseudokinase that plays a key role in TNF-induced necroptosis, a Description

programmed cell death process.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

Protein Information

Name MLKL {ECO:0000303 | PubMed:22265413, ECO:0000312 | HGNC:HGNC:26617}

Function Pseudokinase that plays a key role in TNF-induced necroptosis, a

> programmed cell death process (PubMed:22265413, PubMed:22265414, PubMed: 22421439, PubMed: 24316671). Does not have protein kinase activity

(PubMed:22265413, PubMed:22265414, PubMed:22421439,

PubMed: 24316671). 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

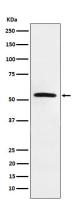
damage (PubMed:22265413, PubMed:22265414, PubMed:22421439,

PubMed: <u>24316671</u>). In addition to TNF-induced necroptosis, necroptosis can also take place in the nucleus in response to orthomyxoviruses infection: following activation by ZBP1, MLKL is phosphorylated by RIPK3 in the nucleus, triggering disruption of the nuclear envelope and leakage of cellular DNA into the cytosol.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 (By similarity). Binds to highly phosphorylated inositol phosphates such as inositolhexakisphosphate (InsP6) which is essential for its necroptotic function (PubMed: 29883610).

Cellular Location

Cytoplasm. Cell membrane Nucleus {ECO:0000250 | UniProtKB:Q9D2Y4}. Note=Localizes to the cytoplasm and translocates to the plasma membrane on necroptosis induction (PubMed:24316671). Localizes to the nucleus in response to orthomyxoviruses infection (By similarity) {ECO:0000250 | UniProtKB:Q9D2Y4, ECO:0000269 | PubMed:24316671}

Images



Western blot analysis of MLKL expression in Hela cell lysate.

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