

Phospho-MLKL (Ser358) Rabbit mAb

Catalog # AP76979

Product Information

ApplicationWB, IHC-PPrimary AccessionQ8NB16ReactivityHumanHostRabbit

Clonality Monoclonal Antibody

Isotype IgG

Conjugate Unconjugated

Immunogen A synthesized peptide derived from human Phospho-MLKL (S358)

Purification Affinity Chromatography

Calculated MW 54479

Additional Information

Gene ID 197259

Other Names MLKL

Dilution WB~~1/500-1/1000 IHC-P~~N/A

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

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:<u>22265413</u>, PubMed:<u>22265414</u>, PubMed:<u>22421439</u>, PubMed:<u>24316671</u>). Does not have protein kinase activity

(PubMed: <u>22265413</u>, PubMed: <u>22265414</u>, PubMed: <u>22421439</u>,

PubMed:<u>24316671</u>). 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:<u>22265413</u>, PubMed:<u>22265414</u>, PubMed:<u>22421439</u>,

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}

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