

## Phospho-MLKL (\$358) Antibody

Rabbit mAb Catalog # AP91575

### **Specification**

# Phospho-MLKL (\$358) Antibody - Product Information

Application WB, IHC
Primary Accession O8NB16
Clonality Monoclonal

Other Names hMLKL; Mlkl;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 54479 Da

### Phospho-MLKL (\$358) Antibody - Additional Information

Dilution WB~~1:1000

IHC~~1:100~500

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

Phospho-MLKL (S358)

Description 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.

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.

### Phospho-MLKL (S358) Antibody - 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:<a href="http://www.uniprot.org/citations/22265413" target="\_blank">22265413</a>, PubMed:<a href="http://www.uniprot.org/citations/22265414" target="\_blank">22265414</a>, PubMed:<a href="http://www.uniprot.org/citations/22421439" target="\_blank">22421439</a>, PubMed:<a href="http://www.uniprot.org/citations/24316671" target="\_blank">24316671</a>).



Does not have protein kinase activity (PubMed:<a

href="http://www.uniprot.org/citations/22265413" target=" blank">22265413</a>, PubMed:<a href="http://www.uniprot.org/citations/22265414" target="blank">22265414</a>, PubMed:<a href="http://www.uniprot.org/citations/22421439" target="\_blank">22421439</a>, PubMed:<a href="http://www.uniprot.org/citations/24316671" target="blank">24316671</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/22265413" target=" blank">22265413</a>, PubMed:<a href="http://www.uniprot.org/citations/22265414" target="\_blank">22265414</a>, PubMed:<a href="http://www.uniprot.org/citations/22421439" target="blank">22421439</a>, PubMed:<a href="http://www.uniprot.org/citations/24316671" target="blank">24316671</a>). 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:<a href="http://www.uniprot.org/citations/29883610" target=" blank">29883610</a>).

#### **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}

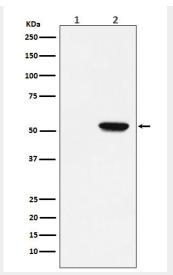
## Phospho-MLKL (S358) Antibody - Protocols

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

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

Phospho-MLKL (\$358) Antibody - Images





Western blot analysis of Phospho-MLKL (S358) expression in (1) HT-29 cell lysate; (2) HT-29 cell lysate treated with TNF alpha+ Smac mimetic+ z-VAD.