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Phospho-MLKL (S358) Antibody

Rabbit mAb
Catalog # AP91575

Product Information

Application	WB, IHC
Primary Accession	Q8NB16
Reactivity	Human
Clonality	Monoclonal
Other Names	hMLKL; Mlkl;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	54479

Additional Information

Dilution	WB 1:500~1:2000 IHC 1:50~1:200
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.

Protein Information

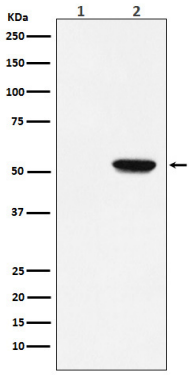
Name	MLKL {ECO:0000303|PubMed:22265413, ECO:0000312|HGNC:HGNC:26617}
Function	Pseudokinase that plays a key role in TNF-induced necroptosis, a programmed cell death process (PubMed:22265413, PubMed:22265414, PubMed:22421439, PubMed:24316671). Does not have protein kinase activity (PubMed:22265413, PubMed:22265414, 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:24316671). 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 Phospho-MLKL (S358) expression in (1) HT-29 cell lysate; (2) HT-29 cell lysate treated with TNF alpha+ Smac mimetic+ z-VAD.

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