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Anti-Phospho-MLKL (S345) Rabbit Monoclonal Antibody

Catalog # ABO16185

Product Information

Application	WB, IP
Primary Accession	Q9D2Y4
Host	Rabbit
Isotype	IgG
Reactivity	Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-Phospho-MLKL (S345) Rabbit Monoclonal Antibody . Tested in WB, IP applications. This antibody reacts with Mouse.

Additional Information

Gene ID	74568
Other Names	Mixed lineage kinase domain-like protein, Mlkl {ECO:0000303|PubMed:23835476, ECO:0000312|MGI:MGI:1921818}
Calculated MW	54317
Application Details	WB 1:500-1:2000 IP 1:50
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: 27M64
Immunogen	A synthesized peptide derived from human Phospho-MLKL (S345)
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

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).

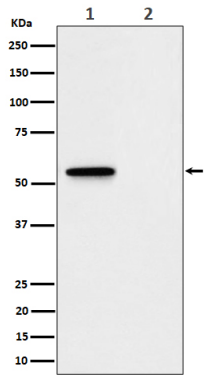
Cellular Location

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

Images



Western blot analysis of Phospho-MLKL (S345) expression in (1) L929 treated with Z-VAD + TNF alpha + SM164 cell lysate; (2) Untreated.

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