

KD-Validated Anti-MLKL Rabbit Monoclonal Antibody
Rabbit monoclonal antibody
Catalog # AGI1258**Specification****KD-Validated Anti-MLKL Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC, ICC
Primary Accession	Q8NB16
Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 54 kDa , observed, 54 kDa KDa
Gene Name	MLKL
Aliases	Mixed Lineage Kinase Domain-Like Protein; FLJ34389; HMLKL; Mixed Lineage Kinase Domain-Like
Immunogen	A synthesized peptide derived from human MLKL

KD-Validated Anti-MLKL Rabbit Monoclonal Antibody - Additional Information

Gene ID	197259
Other Names	
Mixed lineage kinase domain-like protein, hMLKL, MLKL {ECO:0000303 PubMed:22265413, ECO:0000312 HGNC:HGNC:26617}	

KD-Validated Anti-MLKL Rabbit Monoclonal 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: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<http://www.uniprot.org/citations/29883610>).

Cellular Location

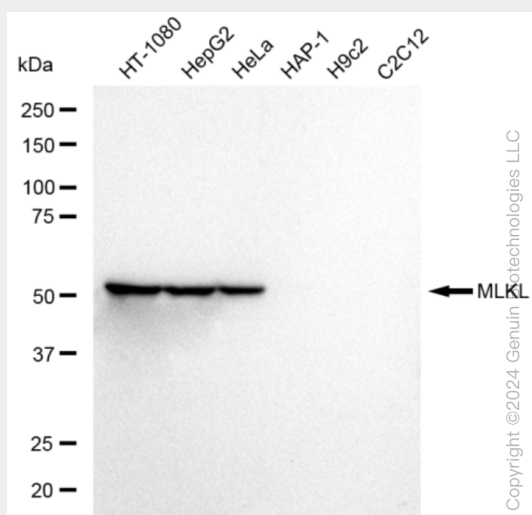
Cytoplasm. Cell membrane Nucleus {ECO:0000250|UniProtKB:Q9D2Y4}. Note=Localizes to the cytoplasm and translocates to the plasma membrane on necroptosis induction (PubMed:24316671). Localizes to the nucleus in response to orthomyxoviruses infection (By similarity) {ECO:0000250|UniProtKB:Q9D2Y4, ECO:0000269|PubMed:24316671}

KD-Validated Anti-MLKL Rabbit Monoclonal Antibody - Protocols

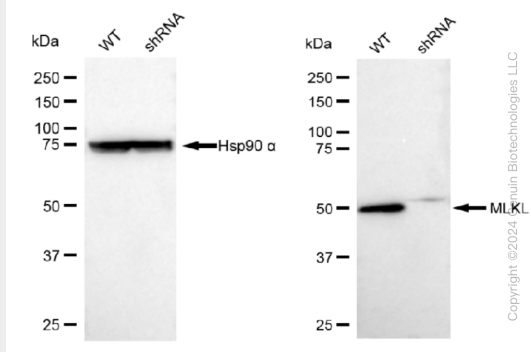
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

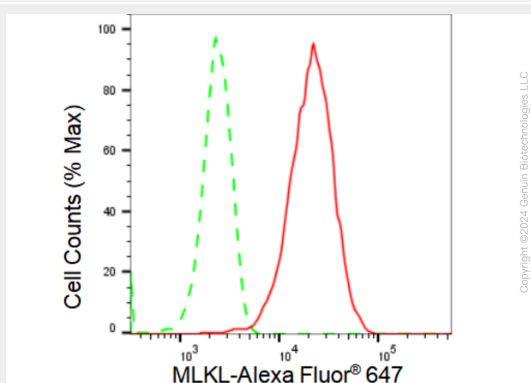
KD-Validated Anti-MLKL Rabbit Monoclonal Antibody - Images



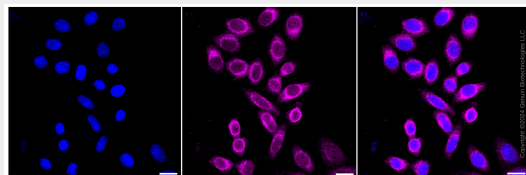
Western blotting analysis using anti-MLKL antibody (Cat#AGI1258). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-MLKL antibody (Cat#AGI1258, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-MLKL antibody (Cat#AGI1258). MLKL expression in wild type (WT) and MLKL shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-MLKL antibody (Cat#AGI1258, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of MLKL expression in HepG2 cells using MLKL antibody (Cat#AGI1258, 1:2,000). Green, isotype control; red, MLKL.



Immunocytochemical staining of HepG2 cells with MLKL antibody (Cat#AGI1258, 1:1,000). Nuclei were stained blue with DAPI; MLKL was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.