# abcam

## Product datasheet

# Anti-MLKL antibody [EPR17514] ab184718





# ★★★★★ 5 Abreviews 64 References 8 Images

#### Overview

**Product name** Anti-MLKL antibody [EPR17514]

**Description** Rabbit monoclonal [EPR17514] to MLKL

**Host species** Rabbit

**Tested applications** Suitable for: ICC/IF, WB, IHC-P

Species reactivity Reacts with: Human

**Immunogen** Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: HUVEC, HT-29 and HeLa whole cell lysates; Human fetal kidney lysate. IHC-P: Human tonsil

and colonic adenocarcinoma tissues.

**General notes** This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

#### **Properties**

**Form** Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

**Purity** Protein A purified

Clonality Monoclonal Clone number EPR17514

Isotype lgG

#### **Applications**

#### The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab184718 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF	*** <u>*</u>	1/200.
WB	**** <u>(4)</u>	1/1000. Detects a band of approximately 54 kDa (predicted molecular weight: 54 kDa).
IHC-P		1/400. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

#### **Target**

Sequence similarities

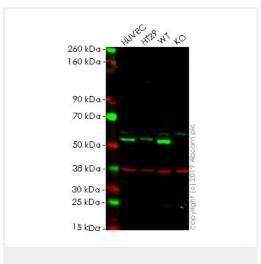
Belongs to the protein kinase superfamily.

Contains 1 protein kinase domain.

**Domain** 

The protein kinase domain is predicted to be catalytically inactive.

#### **Images**



Western blot - Anti-MLKL antibody [EPR17514] (ab184718)

All lanes: Anti-MLKL antibody [EPR17514] (ab184718) at 1/1000

dilution

Lane 1: HUVEC cell lysate

Lane 2: HT-29 cell lysate

Lane 3: Wild-type HeLa cell lysate

Lane 4: MLKL knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

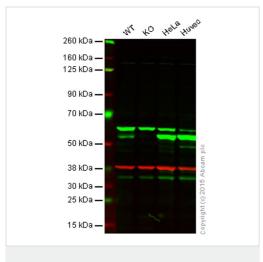
Performed under reducing conditions.

Predicted band size: 54 kDa

**Lanes 1 - 4:** Merged signal (red and green). Green - ab184718 observed at 54 kDa. Red - loading control, <u>ab8245</u> observed at 37 kDa.

ab184718 was shown to react with MLKL in wild-type HeLa cells.

Loss of signal was observed when knockout cell line <a href="mailto:ab255408">ab263788</a>) was used. Wild-type and MLKL knockout samples were subjected to SDS-PAGE. ab184718 and Anti-GAPDH antibody [6C5] - Loading Control (<a href="mailto:ab8245">ab8245</a>) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (<a href="mailto:ab216773">ab216773</a>) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (<a href="mailto:ab216776">ab216776</a>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-MLKL antibody [EPR17514] (ab184718)

**All lanes :** Anti-MLKL antibody [EPR17514] (ab184718) at 1/1000 dilution

Lane 1: Wild-type HAP1 cell lysate

Lane 2: MLKL knockout HAP1 cell lysate

Lane 3 : HeLa cell lysate

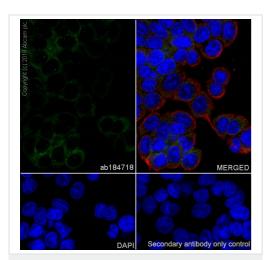
Lane 4 : Huvec cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 54 kDa

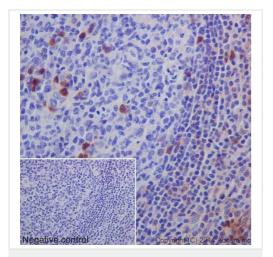
**Lanes 1 - 4:** Merged signal (red and green). Green - ab184718 observed at 55 kDa. Red - loading control, <u>ab8245</u>, observed at 37 kDa.

ab184718 was shown to recognize MLKL in wild-type HAP1 cells along with additional cross-reactive bands. No band was observed when MLKL knockout samples were examined. Wild-type and MLKL knockout samples were subjected to SDS-PAGE. ab184718 and <a href="mailto:ab8245">ab8245</a> (loading control to GAPDH) were diluted to 1/1000 and 1/2000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (<a href="mailto:ab216773">ab216773</a>) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (<a href="mailto:ab216776">ab216776</a>) secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-MLKL antibody [EPR17514] (ab184718)

Ab184718 staining MLKL in HT-29 (Human colorectal adenocarcinoma epithelial cell) cells by Immunocytochemistry (ICC). Cells were fixed with 100% Methanol. Samples were incubated with primary antibody at 1/200 dilution (6.5µg/ml). An AlexaFluor<sup>®</sup> 488 Goat anti-Rabbit (ab150077) was used as the secondary antibody at 1/1000 dilution (2µg/ml). Ab195889 , Antialpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor<sup>®</sup> 594) was used as the counterstain antibody (1/200 dilution, 2.5 µg/ml . DAPI was used as a nuclear counterstain. Confocal image showing cytoplasmic staining on HT-29 cell line.

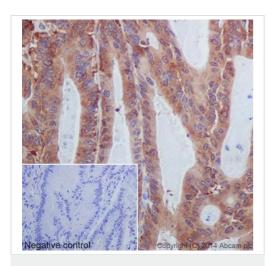


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MLKL antibody
[EPR17514] (ab184718)

Immunohistochemical analysis of paraffin-embedded Human tonsil tissue labeling MLKL with ab184718 at 1/400 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) secondary antibody (<u>ab97051</u>) at 1/500 dilution. Cytoplasmic staining on the lymphocytes of human tonsil is observed. Counter stained with Hematoxylin.

Negative control: Using PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

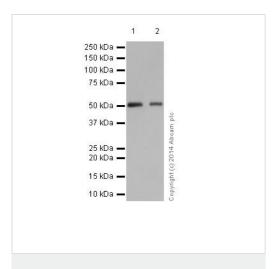


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MLKL antibody
[EPR17514] (ab184718)

Immunohistochemical analysis of paraffin-embedded Human colonic adenocarcinoma tissue labeling MLKL with ab184718 at 1/400 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) secondary antibody (ab97051) at 1/500 dilution. Cytoplasmic staining on tumor cells of human colonic adenocarcinoma is observed. Counter stained with Hematoxylin.

Negative control: Using PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-MLKL antibody [EPR17514] (ab184718)

**All lanes :** Anti-MLKL antibody [EPR17514] (ab184718) at 1/20000 dilution

**Lane 1 :** HUVEC (Human umbilical vein endothelial cell line) whole cell lysate

Lane 2: HT-29 (Human colorectal adenocarcinoma cells) whole cell lysate

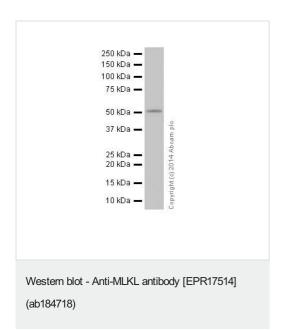
Lysates/proteins at 20 µg per lane.

#### **Secondary**

**All lanes :** Goat Anti-Rabbit lgG, (H+L),Peroxidase conjugated at 1/1000 dilution

Predicted band size: 54 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.



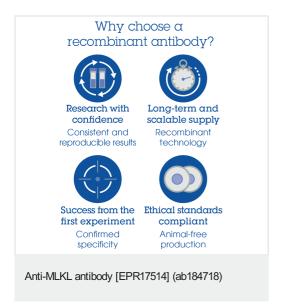
Anti-MLKL antibody [EPR17514] (ab184718) at 1/1000 dilution + Human fetal kidney lysate at 10 µg

#### **Secondary**

Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG at 1/1000 dilution

**Predicted band size:** 54 kDa **Observed band size:** 54 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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