abcam

Product datasheet

Anti-LAMP1 antibody [EPR21026] ab208943

Recombinant RabMAb

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Overview

Product name	Anti-LAMP1 antibody [EPR21026]
Description	Rabbit monoclonal [EPR21026] to LAMP1
Host species	Rabbit
Specificity	In our lab we observe staining in multiple tissues (spleen, lung, kidney etc.) in IHC-P with ab208943, but a lack of staining on mouse brain. We have received feedback from other researchers, that they also do not see staining in mouse brain with this antibody. Therefore we do not recommend using this reagent, for work on mouse brain, in IHC-P. For further information on this please contact our Technical Support team who will be happy to help.
Tested applications	**Suitable for:** WB, IHC-P, IHC-Fr, IP, ICC/IF, Flow Cyt (Intra)
Species reactivity	**Reacts with:** Mouse
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Mouse lung, colon, kidney and liver lysates; Neuro-2a, RAW 264.7 and NIH/3T3 whole cell lysates. IHC-P: Mouse spleen and lung tissues. IHC-Fr: Mouse kidney tissue. ICC/IF: NIH/3T3 and Neuro-2a cells. Flow Cyt (intra): Neuro-2a cells. IP: NIH/3T3 whole cell lysate.
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: 0.05% BSA, 40% Glycerol, PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR21026
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab208943 in the following tested applications.

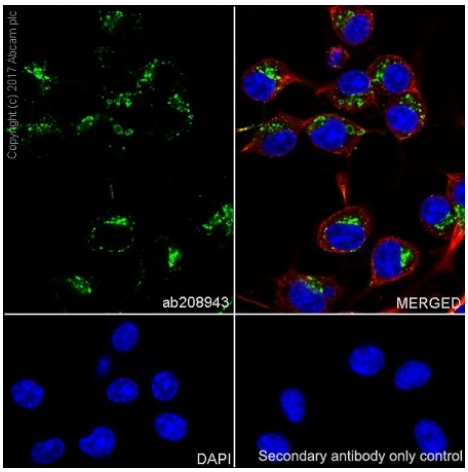
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000. Detects a band of approximately 90-120 kDa (predicted molecular weight: 43 kDa).
IHC-P	★★★☆☆ (1)	1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. Works well in IHC-P on multiple tissues, but does not work on mouse brain, in this application.
IHC-Fr		1/100. Perform heat mediated antigen retrieval using sodium citrate buffer (pH 6.0).
IP		1/30.
ICC/IF	★★★★★ (1)	1/100.
Flow Cyt (Intra)		1/500.

Target

Function	Presents carbohydrate ligands to selectins. Also implicated in tumor cell metastasis.
Sequence similarities	Belongs to the LAMP family.
Post-translational modifications	O- and N-glycosylated; some of the 18 N-linked glycans are polylactosaminoglycans.
Cellular localization	Cell membrane. Endosome membrane. Lysosome membrane. This protein shuttles between lysosomes, endosomes, and the plasma membrane.

Images

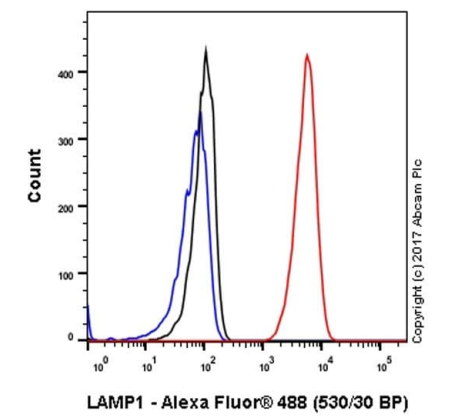


Immunocytochemistry/ Immunofluorescence - Anti-LAMP1 antibody [EPR21026] (ab208943)

Immunofluorescent analysis of 100% methanol-fixed Neuro-2a (mouse neuroblastoma cell line) cells labeling LAMP1 with ab208943 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on Neuro-2a cell line.

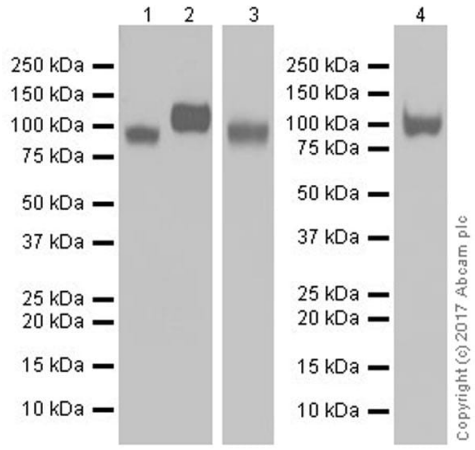
The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**), at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution.



Flow Cytometry (Intracellular) - Anti-LAMP1 antibody [EPR21026] (ab208943)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methonol-permeabilized Neuro-2a (mouse neuroblastoma cell line) cell line labeling LAMP1 with ab208943 at 1/500 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**), at 1/2000 dilution was used as the secondary antibody.



Western blot - Anti-LAMP1 antibody [EPR21026] (ab208943)

All lanes : Anti-LAMP1 antibody [EPR21026] (ab208943) at 1/2000 dilution

Lane 1 : Neuro-2a (mouse neuroblastoma cell line) whole cell lysate at 20 µg
Lane 2 : RAW 264.7 (mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate at 20 µg
Lane 3 : Mouse kidney lysate at 20 µg
Lane 4 : NIH/3T3 (mouse embryo fibroblast cell line) whole cell lysate at 10 µg

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

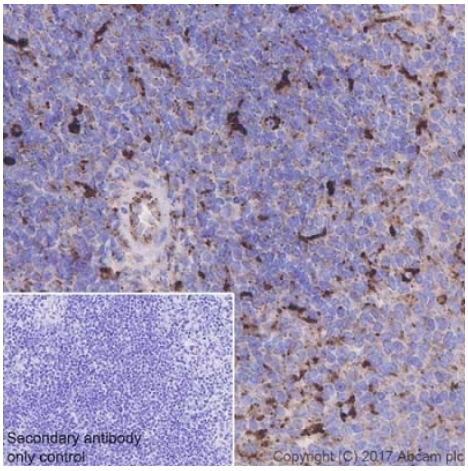
Developed using the ECL technique.

Predicted band size: 43 kDa
Observed band size: 90-120 kDa

Exposure time : Lanes 1-2: 3 minutes; Lane 3: 5 seconds; Lane 4: 10 seconds.

Blocking and dilution buffer: 5% NFDM/TBST.

The varying band sizes are due to different levels of glycosylation (PMID: 10212251, PMID: 26246576).

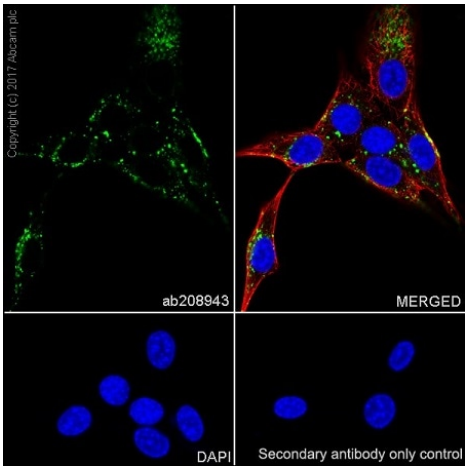


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LAMP1 antibody [EPR21026] (ab208943)

Immunohistochemical analysis of paraffin-embedded mouse spleen tissue labeling LAMP1 with ab208943 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Granular cytoplasmic staining on mouse spleen was observed, performed on a Leica Biosystems BOND® RX instrument (PMID: 22008915). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Note: BOND® is a registered trademark of Leica Biosystems Melbourne Pty Ltd.
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

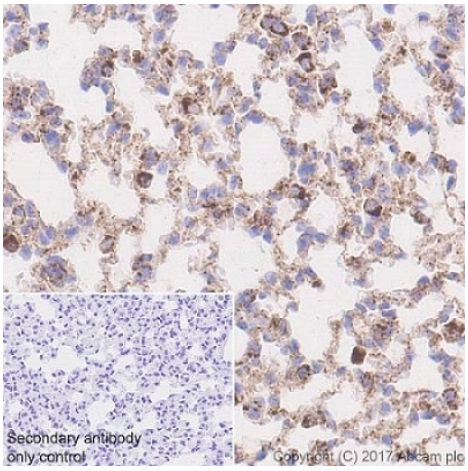


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LAMP1 antibody [EPR21026] (ab208943)

Immunofluorescent analysis of 100% methanol-fixed NIH/3T3 (mouse embryo fibroblast cell line) cells labeling LAMP1 with ab208943 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on NIH/3T3 cell line.

The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**), at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution.
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

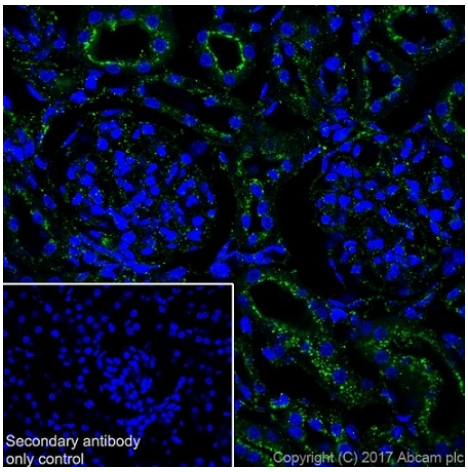


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LAMP1 antibody [EPR21026] (ab208943)

Immunohistochemical analysis of paraffin-embedded mouse lung tissue labeling LAMP1 with ab208943 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Granular cytoplasmic staining on mouse spleen was observed, performed on a Leica Biosystems BOND® RX instrument (PMID: 22008915). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

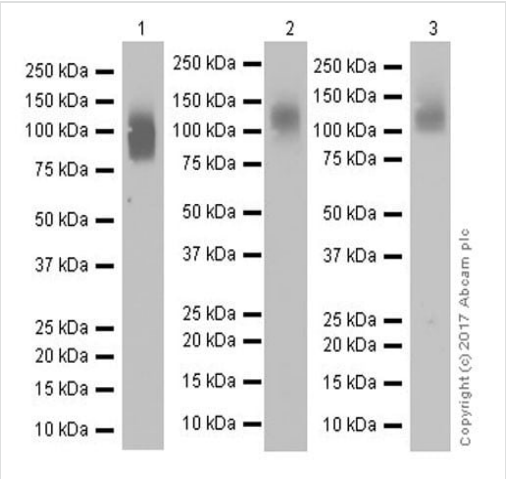
Note: BOND® is a registered trademark of Leica Biosystems Melbourne Pty Ltd.
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Frozen sections) - Anti-LAMP1 antibody [EPR21026] (ab208943)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized mouse kidney tissue labeling LAMP1 with ab208943 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) at 1/1000 dilution (green). Cytoplasmic staining in the endothelial cells of glomeruli and epithelial cells of renal tubules (PMID: 23229015; PMID:23635510). The nuclear counter stain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) at 1/1000 dilution.



Western blot - Anti-LAMP1 antibody [EPR21026] (ab208943)

All lanes : Anti-LAMP1 antibody [EPR21026] (ab208943) at 1/1000 dilution

Lane 1 : Mouse lung lysate
Lane 2 : Mouse colon lysate
Lane 3 : Mouse liver lysate

Lysates/proteins at 10 µg per lane.

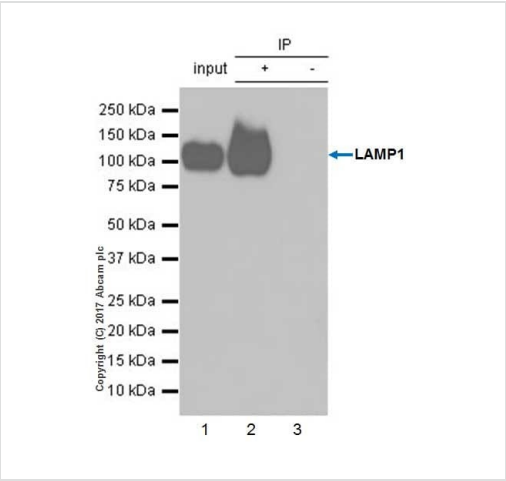
Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/50000 dilution

Developed using the ECL technique.

Predicted band size: 43 kDa
Observed band size: 90-120 kDa

Exposure time : Lanes 1-2: 15 seconds; Lane 3: 5 seconds.

Blocking and dilution buffer: 5% NFDM/TBST.



Immunoprecipitation - Anti-LAMP1 antibody [EPR21026] (ab208943)

LAMP1 was immunoprecipitated from 0.35 mg of NIH/3T3 (mouse embryo fibroblast cell line) whole cell lysate with ab208943 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab208943 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/10000 dilution.

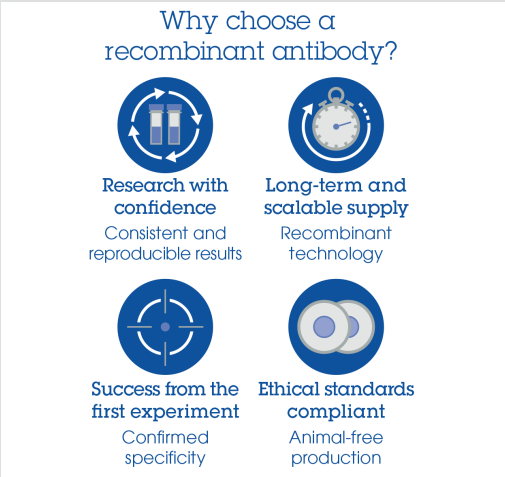
Lane 1: NIH/3T3 whole cell lysate 10 µg (Input).

Lane 2: ab208943 IP in NIH/3T3 whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab208943 in NIH/3T3 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 1 second.



Anti-LAMP1 antibody [EPR21026] (ab208943)

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