

Anti-LAMP2A antibody [EPR4207(2)] - Lysosome Marker ab125068

敲除验证
重组
RabMAb

★★★★☆
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概述

产品名称	Anti-LAMP2A抗体[EPR4207(2)] - Lysosome Marker
描述	兔单克隆抗体[EPR4207(2)] to LAMP2A - Lysosome Marker
宿主	Rabbit
特异性	<p>This antibody does not react with mouse and rat species in Immunocytochemistry/Immunofluorescence application.</p> <p>LAMP2A is highly expressed in placenta, lung and liver, less in kidney and pancreas, low in brain and skeletal muscle (PMID: 10212251PubMed:7488019, PubMed:26856698).</p> <p>For better using it in tissue with low expression level, we suggest optimizing experimental protocols (increasing lysate amount, using lower dilution or higher sensitivity ECL substrate).</p>

经测试应用	适用于: WB, IP, IHC-P, Flow Cyt (Intra), ICC/IF
种属反应性	与反应: Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	<p>WB: HeLa, Jurkat, ECV-304, JAR, NIH/3T3, RAW 264.7, PC-12 and C6 whole cell lysates. Mouse kidney lysates and Rat liver and kidney lysates. IHC-P: Human placenta and liver tissue. Mouse and rat liver tissue. IP: HeLa and RAW 264.7 whole cell lysates. Flow Cyt (intra): HeLa cells. ICC/IF: Wild-type HeLa cells.</p>
常规说明	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.
存储溶液	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 0.05% BSA, 59% PBS
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR4207(2)
同种型	IgG

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab125068于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

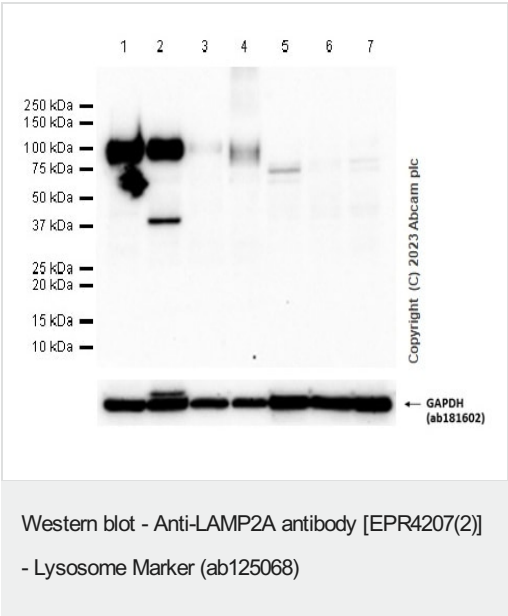
应用	Ab评论	说明
WB	★★★★☆ (2)	1/2000. Detects a band of approximately 120 kDa (predicted molecular weight: 45 kDa).
IP		1/60 - 1/100.
IHC-P		1/200 - 1/500. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See <u>IHC antigen retrieval protocols</u> .
Flow Cyt (Intra)		1/1000.
ICC/IF		Use a concentration of 0.04 - 1 µg/ml. We recommend permeabilisation with 0.1% Tween-20, 5 min. This antibody does not react with mouse and rat species in Immunocytochemistry/ Immunofluorescence application.

靶标

功能	Implicated in tumor cell metastasis. May function in protection of the lysosomal membrane from autodigestion, maintenance of the acidic environment of the lysosome, adhesion when expressed on the cell surface (plasma membrane), and inter- and intracellular signal transduction. Protects cells from the toxic effects of methylating mutagens.
组织特异性	Isoform LAMP-2A is highly expressed in placenta, lung and liver, less in kidney and pancreas, low in brain and skeletal muscle. Isoform LAMP-2B is highly expressed in skeletal muscle, less in brain, placenta, lung, kidney and pancreas, very low in liver.
疾病相关	Danon disease
序列相似性	Belongs to the LAMP family.
翻译后修饰	O- and N-glycosylated; some of the 16 N-linked glycans are polylactosaminoglycans.

细胞定位	Cell membrane. Endosome membrane. Lysosome membrane. This protein shuttles between lysosomes, endosomes, and the plasma membrane.
形式	Alternative splicing produces 3 isoforms.

图片



All lanes : Anti-LAMP2A antibody [EPR4207(2)] - Lysosome Marker (ab125068) at 1/1000 dilution

- Lane 1 :** Mouse kidney tissue lysate
- Lane 2 :** Mouse liver tissue lysate
- Lane 3 :** Mouse spleen tissue lysate
- Lane 4 :** Mouse lung tissue lysate
- Lane 5 :** Mouse brain tissue lysate
- Lane 6 :** Mouse cerebral cortex tissue lysate
- Lane 7 :** Mouse heart tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Predicted band size: 45 kDa
Observed band size: 100 kDa

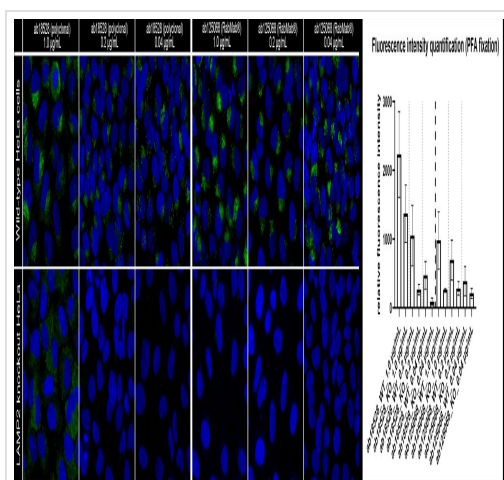
Exposure time: 40 seconds

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

[ab181602](#) was used as a GAPDH loading control.

LAMP2A is highly expressed in placenta, lung and liver, less in kidney and pancreas, low in brain and skeletal muscle (PMID: 10212251PubMed:7488019, PubMed:26856698).

For better using it in tissue with low expression level, we suggest optimizing experimental protocols (increasing lysate amount, using lower dilution or higher sensitivity ECL substrate).

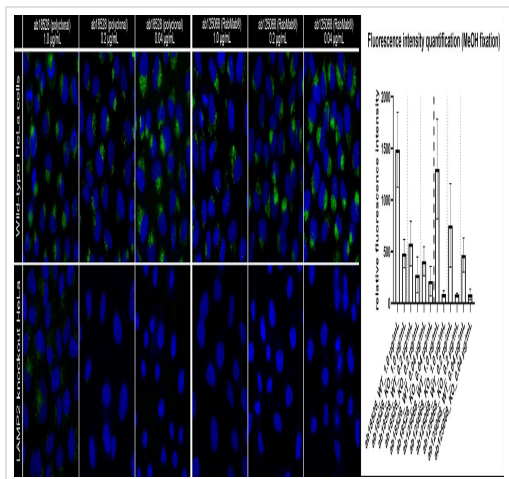


Immunocytochemistry/ Immunofluorescence - Anti-LAMP2A antibody [EPR4207(2)] - Lysosome Marker (ab125068)

Side-by-side comparison of ICC performance using the rabbit polyclonal **ab18528** and RabMab® **ab125068**. Staining was performed on wild-type HeLa cells (top panel) and LAMP2 knockout HeLa cells (bottom panel, available as **ab255402**). The cells were fixed with 4% PFA (10 min), permeabilized with 0.1% Tween-20 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with **ab18528** or **ab125068** overnight at +4°C at 3 different concentrations: 1.0 µg/mL, 0.2 µg/mL and 0.04 µg/mL. Secondary antibody incubation was at room temperature for 1h with a goat secondary antibody to Rabbit IgG (Alexa Fluor® 488) (**ab150081**) (shown in green) at 1/1000 and nuclear DNA was labelled with DAPI (shown in blue).

Images were acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown. Some cytoplasmic cross-reactivity is seen using **ab18528** at 1.0 µg/mL, but further titration of the antibody improves the ICC staining result. The RabMab® **ab125068** shows negligible non-specific staining across the dilution range. Quantification of the antibody signal was performed using a minimum of 135 cells and data are presented as mean ± SD.

Optimal dilutions/concentrations may vary across different cell types/experiment conditions and should be determined by the end user.

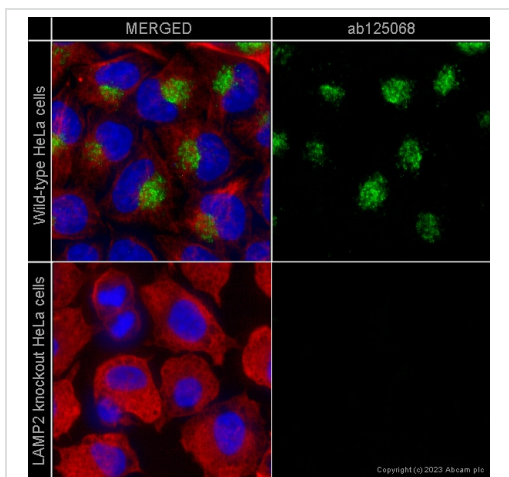


Immunocytochemistry/ Immunofluorescence - Anti-LAMP2A antibody [EPR4207(2)] - Lysosome Marker (ab125068)

Side-by-side comparison of ICC performance using the rabbit polyclonal **ab18528** and RabMab® ab125068. Staining was performed on wild-type HeLa cells (top panel) and LAMP2 knockout HeLa cells (bottom panel, available as **ab255402**). The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% Tween-20 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with **ab18528** or ab125068 overnight at +4°C at 3 different concentrations: 1.0 µg/mL, 0.2 µg/mL and 0.04 µg/mL. Secondary antibody incubation was at room temperature for 1h with a goat secondary antibody to Rabbit IgG (Alexa Fluor® 488) (**ab150081**) (shown in green) at 1/1000 and nuclear DNA was labelled with DAPI (shown in blue).

Images were acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown. Some cytoplasmic cross-reactivity is seen using **ab18528** at 1.0 µg/mL, but further titration of the antibody improves the ICC staining result. The RabMab® ab125068 shows negligible non-specific staining across the dilution range. Quantification of the antibody signal was performed using a minimum of 180 cells and data are presented as mean ± SD.

Optimal dilutions/concentrations may vary across different cell types/experiment conditions and should be determined by the end user.

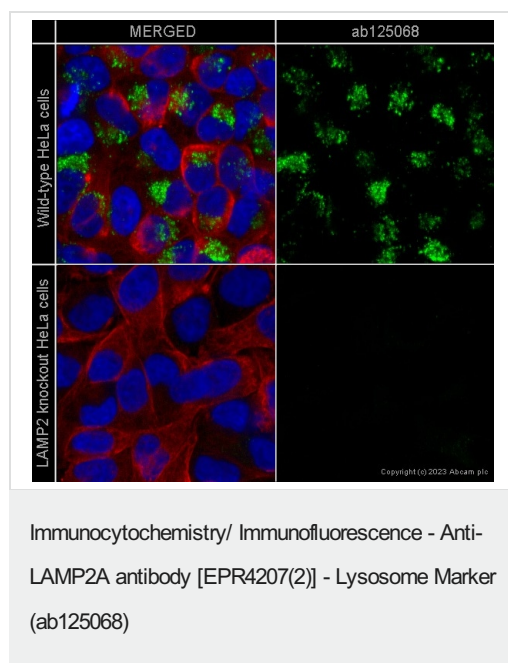


Immunocytochemistry/ Immunofluorescence - Anti-LAMP2A antibody [EPR4207(2)] - Lysosome Marker (ab125068)

ab125068 staining LAMP2a in wild-type HeLa cells (top panel) and LAMP2 knockout HeLa cells (bottom panel, available as **ab255402**). The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% Tween-20 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab125068 at 0.04 µg/mL and **ab7291** at 1 µg/mL overnight at +4°C, followed by a further incubation at room temperature for 1h with a goat secondary antibody to Rabbit IgG (Alexa Fluor® 488) (**ab150081**) (shown in green) and goat secondary antibody to Mouse IgG (Alexa Fluor® 594) (**ab150120**) (shown in red) both at 1/1000. Nuclear DNA was labelled with DAPI (shown in blue).

In our hands, permeabilization with 0.1% Triton X-100 (5 min) resulted in greatly reduced signal and we recommend using 0.1% Tween-20 (5 min) for detecting this target.

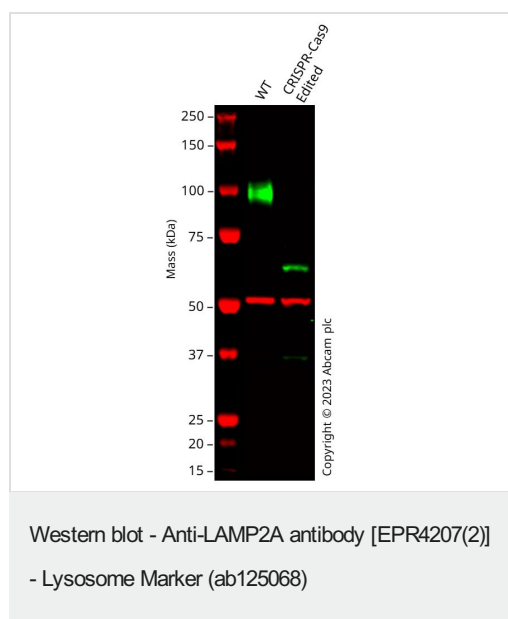
Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.



ab125068 staining LAMP2a in wild-type HeLa cells (top panel) and LAMP2 knockout HeLa cells (bottom panel, available as [ab255402](#)). The cells were fixed with 4% formaldehyde (10min), permeabilized with 0.1% Tween-20 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab125068 at 0.04 µg/mL and [ab7291](#) at 1 µg/mL overnight at +4°C, followed by a further incubation at room temperature for 1h with a goat secondary antibody to Rabbit IgG (Alexa Fluor® 488) ([ab150081](#)) (shown in green) and goat secondary antibody to Mouse IgG (Alexa Fluor® 594) ([ab150120](#)) (shown in red) both at 1/1000. Nuclear DNA was labelled with DAPI (shown in blue).

In our hands, permeabilization with 0.1% Triton X-100 (5 min) resulted in greatly reduced signal and we recommend using 0.1% Tween-20 (5 min) for detecting this target.

Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.



All lanes : Anti-LAMP2A antibody [EPR4207(2)] - Lysosome Marker (ab125068) at 1/2000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : LAMP2 CRISPR-Cas9 edited HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Developed using the ECL technique.

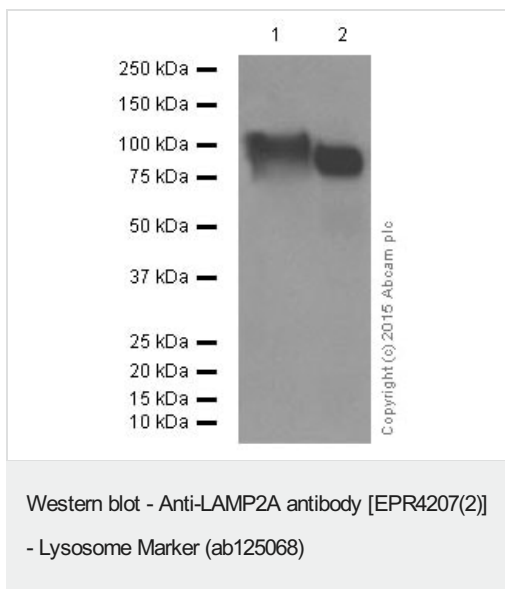
Performed under reducing conditions.

Predicted band size: 45 kDa

Observed band size: 100 kDa

False colour image of Western blot: Anti-LAMP2A antibody [EPR4207(2)] - Lysosome Marker staining at 1/2000 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] ([ab7291](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab125068 was shown to bind specifically to LAMP2A. A band was observed at 100 kDa in wild-type HeLa cell lysates with no signal observed at this size in LAMP2 CRISPR-

Cas9 edited cell line **ab255402** (CRISPR-Cas9 edited cell lysate **ab263861**). The band observed in the CRISPR-Cas9 edited lysate lane below 100 kDa is likely to represent a truncated form of LAMP2A. This has not been investigated further and the functional properties of the gene product have not been determined. To generate this image, wild-type and LAMP2 CRISPR-Cas9 edited HeLa cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



All lanes : Anti-LAMP2A antibody [EPR4207(2)] - Lysosome Marker (ab125068) at 1/2000 dilution (purified)

Lane 1 : Mouse kidney tissue lysate

Lane 2 : Rat kidney tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

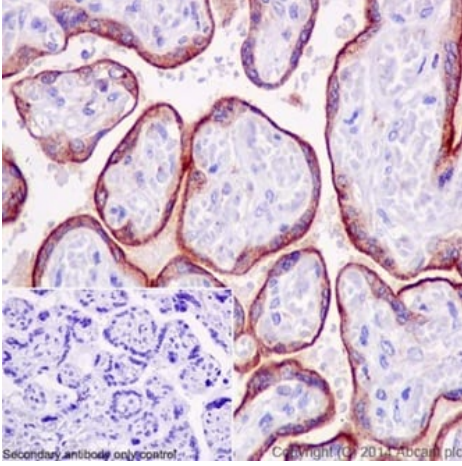
All lanes : Peroxidase-conjugated goat anti-rabbit IgG, (H+L) at 1/1000 dilution

Predicted band size: 45 kDa

Observed band size: 100 kDa

Blocking and dilution buffer: 5% NFDM/TBST.

Difference in MW may be caused by different degree of glycosylation.

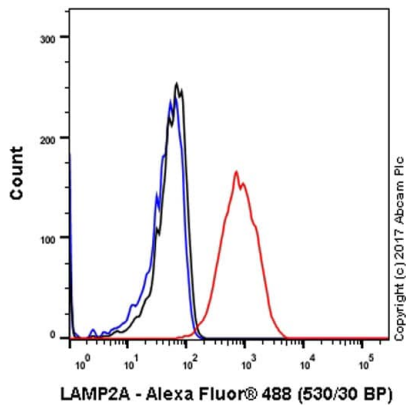


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LAMP2A antibody [EPR4207(2)] - Lysosome Marker (ab125068)

Immunohistochemical analysis of paraffin-embedded Human placenta labeling LAMP2A with unpurified ab125068 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Cytoplasmic and membrane staining on human placenta tissue is observed. Counter stained with Hematoxylin.

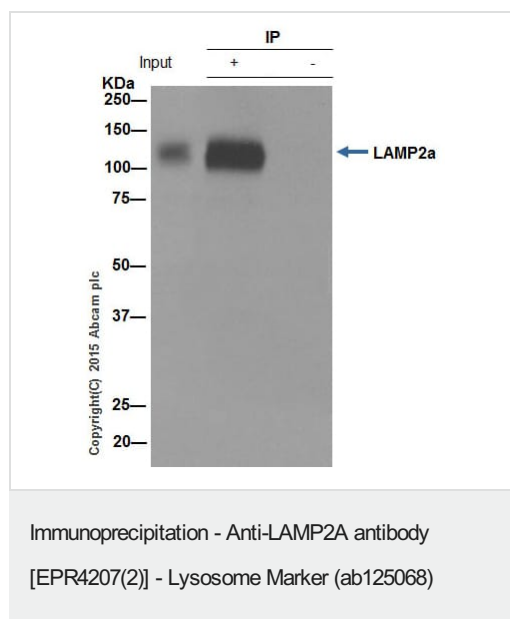
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-LAMP2A antibody [EPR4207(2)] - Lysosome Marker (ab125068)

Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling LAMP2A (red) with ab125068 at a 1/1000 dilution. Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol. A goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) was used as the secondary antibody at a 1/2000 dilution. Black - Rabbit monoclonal IgG (**ab172730**). Blue (unlabeled control) - Cells without incubation with the primary and secondary antibodies.



ab125068 (purified) at 1/60 immunoprecipitating LAMP2A in HeLa whole cell lysate.

Lane 1 (input): HeLa whole cell lysate (10µg)

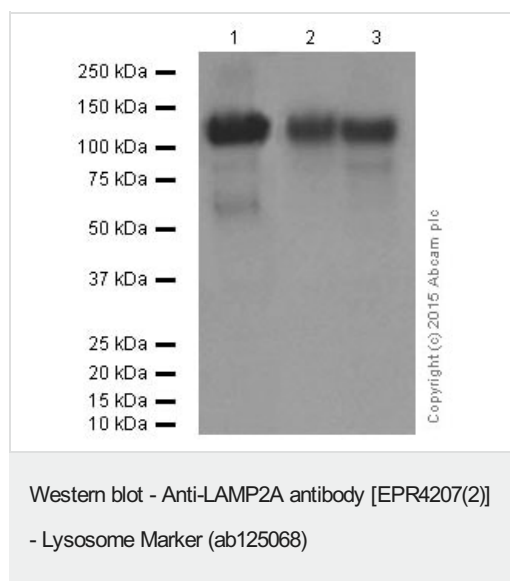
Lane 2 (+): ab125068 + HeLa whole cell lysate (10µg).

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab125068 in HeLa whole cell lysate.

For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/1500 dilution.

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



All lanes : Anti-LAMP2A antibody [EPR4207(2)] - Lysosome Marker (ab125068) at 1/10000 dilution (purified)

Lane 1 : Jurkat cell lysate

Lane 2 : ECV-304 cell lysate

Lane 3 : JAR cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

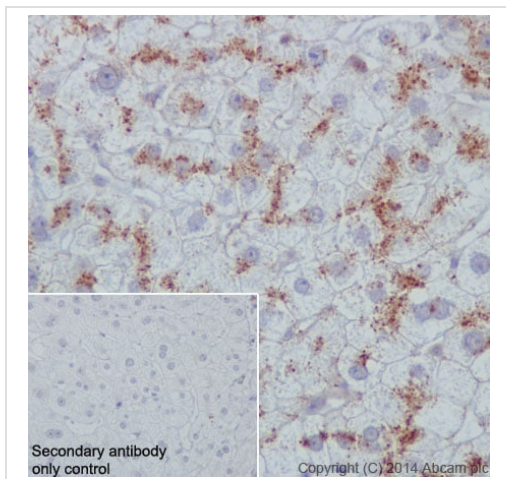
All lanes : Peroxidase-conjugated goat anti-rabbit IgG, (H+L) at 1/1000 dilution

Predicted band size: 45 kDa

Observed band size: 120 kDa

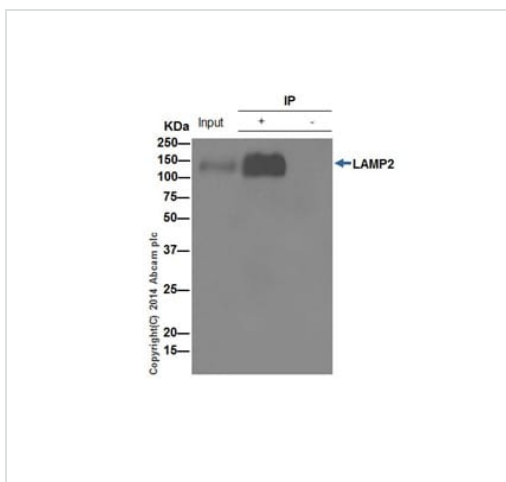
Blocking and dilution buffer: 5% NFDM/TBST.

May be seen at ~50 kDa representing the unglycosylated isoforms of LAMP2 and ~120 kDa representing the glycosylated form.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LAMP2A antibody [EPR4207(2)] - Lysosome Marker (ab125068)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver tissue labelling LAMP2A with purified ab125068 at 1/200. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. **ab97051**, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



Immunoprecipitation - Anti-LAMP2A antibody [EPR4207(2)] - Lysosome Marker (ab125068)

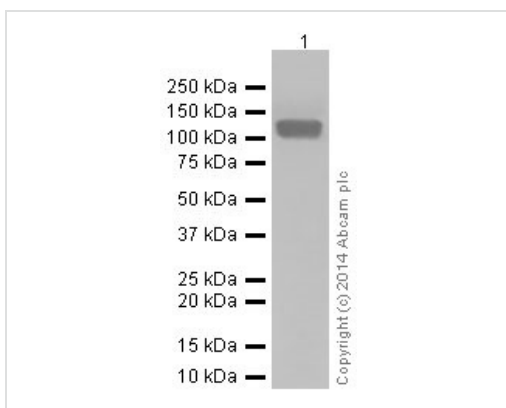
LAMP2A was immunoprecipitated from 1mg of HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate with unpurified ab125068 at 1/100 dilution. Western blot was performed from the immunoprecipitate using ab125068 at 1/2000 dilution. Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG was used as secondary antibody at 1/1500 dilution.

Lane 1: HeLa whole cell lysate 10ug (Input).

Lane 2: ab125068 IP in HeLa whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab125068 in HeLa whole cell lysate.

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



Western blot - Anti-LAMP2A antibody [EPR4207(2)] - Lysosome Marker (ab125068)

Anti-LAMP2A antibody [EPR4207(2)] - Lysosome Marker (ab125068) at 1/5000 dilution (unpurified) + HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate at 20 µg

Secondary

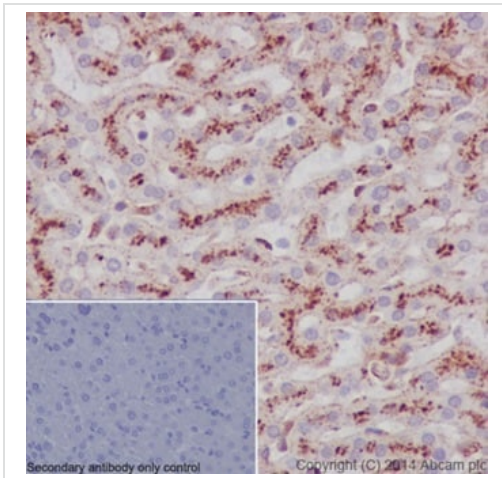
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 45 kDa

Observed band size: 120 kDa

Exposure time: 3 minutes

Blocking and Diluting buffer and concentration: 5% NFDM/TBST

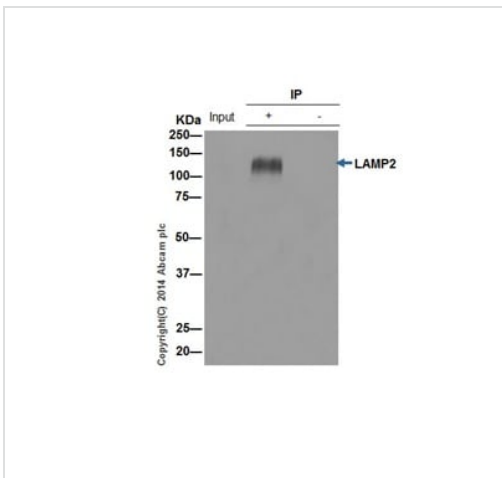


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LAMP2A antibody [EPR4207(2)] - Lysosome Marker (ab125068)

Immunohistochemical analysis of paraffin-embedded Human liver labeling LAMP2A with unpurified ab125068 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution. Cytoplasmic and membrane staining on human liver tissue is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used 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 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-LAMP2A antibody [EPR4207(2)] - Lysosome Marker (ab125068)

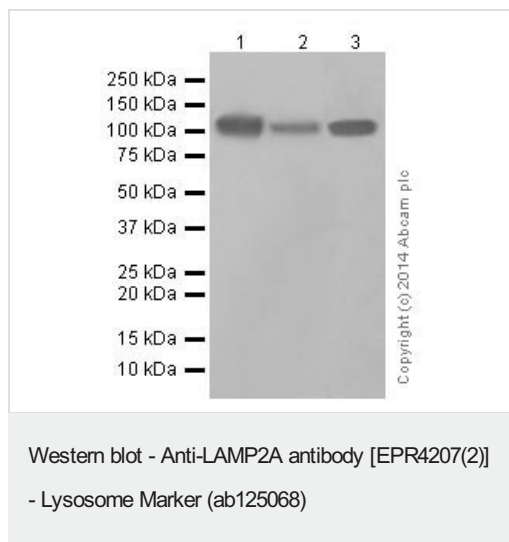
LAMP2A was immunoprecipitated from 1mg of RAW 264.7 (Mouse macrophage cells transformed with Abelson murine leukemia virus) whole cell lysate with ab125068 at 1/100 dilution. Western blot was performed from the immunoprecipitate using unpurified ab125068 at 1/2000 dilution. Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG was used as secondary antibody at 1/1500 dilution.

Lane 1: RAW 264.7 whole cell lysate 10ug (Input).

Lane 2: ab125068 IP in RAW 264.7 whole cell lysate.

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab125068 in RAW 264.7 whole cell lysate.

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



All lanes : Anti-LAMP2A antibody [EPR4207(2)] - Lysosome Marker (ab125068) at 1/5000 dilution (unpurified)

Lane 1 : Jurkat (Human T cell leukemia cells from peripheral blood) whole cell lysate

Lane 2 : ECV-304 (Human urinary bladder cancer cell line) whole cell lysate

Lane 3 : JAR (Human placenta choriocarcinoma cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

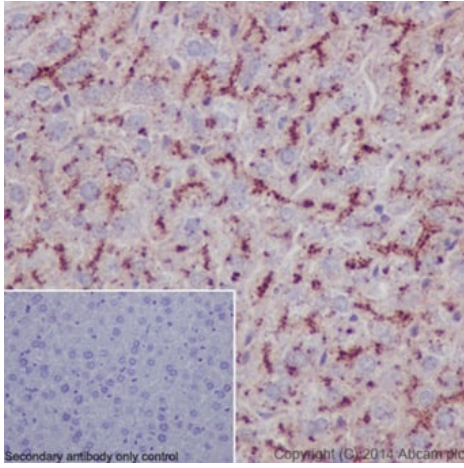
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 45 kDa

Observed band size: 120 kDa

Exposure time: 30 seconds

Blocking and Diluting buffer and concentration: 5% NFDM/TBST

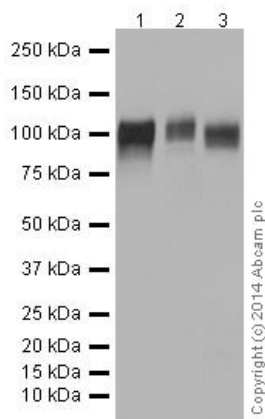


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LAMP2A antibody [EPR4207(2)] - Lysosome Marker (ab125068)

Immunohistochemical analysis of paraffin-embedded Mouse liver labeling LAMP2A with unpurified ab125068 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution. Cytoplasmic and membrane staining on mouse liver tissue is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used 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 before commencing with IHC staining protocol.



Western blot - Anti-LAMP2A antibody [EPR4207(2)] - Lysosome Marker (ab125068)

All lanes : Anti-LAMP2A antibody [EPR4207(2)] - Lysosome Marker (ab125068) at 1/2000 dilution (unpurified)

Lane 1 : Mouse kidney

Lane 2 : RAW 264.7 (Mouse macrophage cells transformed with Abelson murine leukemia virus) whole cell lysate

Lane 3 : NIH/3T3 (Mouse embryo fibroblast cells) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

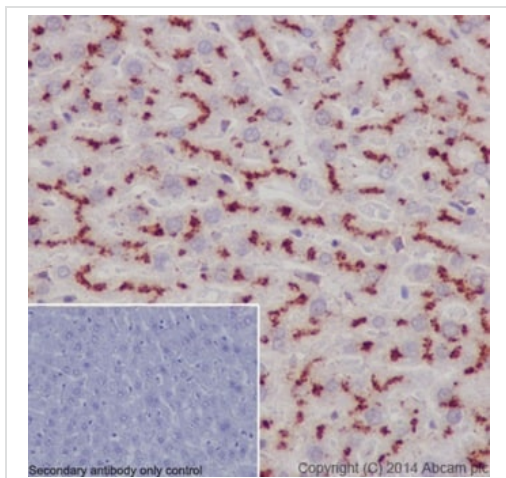
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 45 kDa

Observed band size: 120 kDa

Exposure time: 3 minutes

Blocking and Diluting buffer and concentration: 5% NFDM /TBST

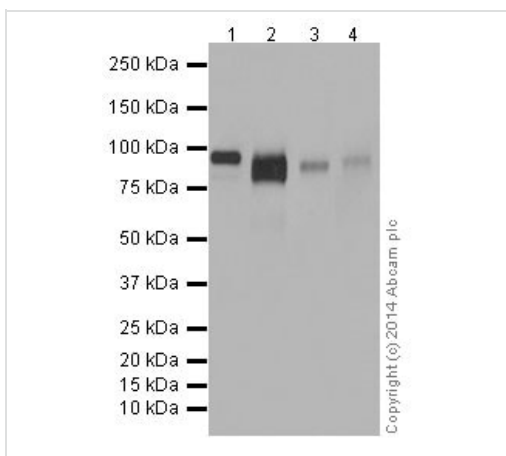


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LAMP2A antibody [EPR4207(2)] - Lysosome Marker (ab125068)

Immunohistochemical analysis of paraffin-embedded Rat liver labeling LAMP2A with unpurified ab125068 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution. Cytoplasmic and membrane staining on rat liver tissue is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used 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 before commencing with IHC staining protocol.



Western blot - Anti-LAMP2A antibody [EPR4207(2)] - Lysosome Marker (ab125068)

All lanes : Anti-LAMP2A antibody [EPR4207(2)] - Lysosome Marker (ab125068) at 1/2000 dilution (unpurified)

Lane 1 : Rat liver

Lane 2 : Rat kidney

Lane 3 : C6 (Rat glial tumor cells) whole cell lysate

Lane 4 : PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 45 kDa

Exposure time: 3 minutes

Blocking and Diluting buffer and concentration: 5% NFDm/TBST.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-LAMP2A antibody [EPR4207(2)] - Lysosome Marker (ab125068)

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

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- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.cn/abpromise> or contact our technical team.

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