abcam

Product datasheet

Anti-LAMP2 antibody [H4B4] - Lysosome Marker ab25631

★★★★★ 19 Abreviews 175 References 7 图像

概述

产**品名称** Anti-LAMP2抗体[H4B4] - Lysosome Marker

描述 小鼠单克隆抗体[H4B4] to LAMP2 - Lysosome Marker

宿主 Mouse

经测试应用 适用于: ICC, ICC/IF, IHC-Fr, WB, IHC-FoFr, Flow Cyt (Intra), IHC-P

种属反应性 与反应: Human, Rhesus monkey, African green monkey

不与反应: Mouse, Rat

免疫原 Tissue, cells or virus corresponding to Human LAMP2. Human adherent peripheral blood cells

阳性对照 Flow Cyt (Intra): THP1 cells.

常规说明

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or

contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

性能

形式 Liquid

存放说明 Shipped at 4°C. Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.

存储溶液 pH: 8.20

Constituent: 100% Borate buffered saline

纯**度** Affinity purified

 克隆
 单克隆

 克隆编号
 H4B4

 同种型
 IgG1

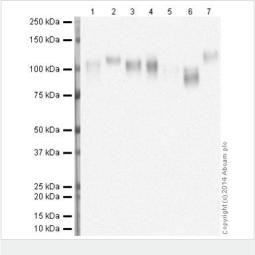
应用

Abpromise™承诺保证使用ab25631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
ICC	★★★★☆ (1)	Use at an assay dependent concentration.
ICC/IF	★★★★★ (11)	Use at an assay dependent concentration.
IHC-Fr	★★★★☆ (1)	Use at an assay dependent concentration.
WB	★★★★★ (5)	Use at an assay dependent concentration. In our hands milk blocking is gives superior results to BSA blocking for this product.
IHC-FoFr		Use at an assay dependent concentration. (PMID 19837699).
Flow Cyt (Intra)		Use 0.5-1µg for 10 ⁶ cells. ab170190 - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.
IHC-P	****(1)	Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

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	Defects in LAMP2 are the cause of Danon disease (DAND) [MIM:300257]; also known as glycogen storage disease type 2B (GSD2B). DAND is a lysosomal glycogen storage disease characterized by the clinical triad of cardiomyopathy, vacuolar myopathy and mental retardation. It is often associated with an accumulation of glycogen in muscle and lysosomes.
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	



Western blot - Anti-LAMP2 antibody [H4B4] - Lysosome Marker (ab25631)

All lanes : Anti-LAMP2 antibody [H4B4] - Lysosome Marker (ab25631) at 1/500 dilution

Lane 1: HeLa cell lysate

Lane 2: Jurkat cell lysate

Lane 3: Human liver lysate

Lane 4: Human liver membrane fraction lysate

Lane 5: Human skeletal muscle lysate

Lane 6: Human brain lysate

Lane 7: Human kidney lysate

Lysates/proteins at 20 µg per lane.

Secondary

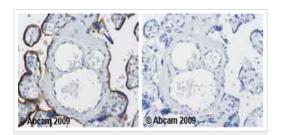
All lanes : Goat Anti-Mouse IgG H&L (HRP) preadsorbed (ab97040) at 1/50000 dilution

Performed under reducing conditions.

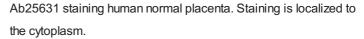
Additional bands at: 100 kDa (possible post-translational modification), 110 kDa (possible post-translational modification), 120 kDa (possible post-translational modification)

Exposure time: 20 minutes

This blot was produced using a 4-12% Bis-Tris gel under the MOPS buffer system under denaturing, reducing conditions. The gel was run at 200V for 60 minutes before being transferred onto a nitrocellulose membrane at 30V for 70 minutes. After transfer, the membrane was blocked for an hour in 3% milk before being incubated overnight at 4°C with mouse monoclonal [H4B4] to LAMP2 (ab25631; diluted 1:5000). Antibody binding was detected using peroxidase labelled goat anti-mouse IgG (ab97040; diluted 1:50000) for an hour at room temperature and visualised using ECL development solution.

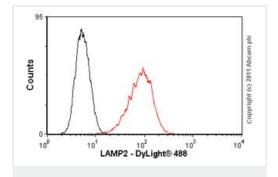


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-LAMP2 antibody [H4B4] - Lysosome Marker (ab25631)



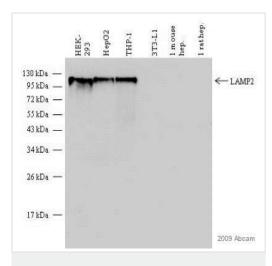
Left panel: with primary antibody at 1 ug/ml. Right panel: isotype control.

Sections were stained using an automated system DAKO Autostainer Plus, at room temperature. Sections were rehydrated and antigen retrieved with the Dako 3-in-1 AR buffers EDTA pH 9.0 in a DAKO PT Link. Slides were peroxidase blocked in 3% H2O2 in methanol for 10 minutes. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 minutes and detected with Dako Envision Flex amplification kit for 30 minutes. Colorimetric detection was completed with Diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that for manual staining we recommend to optimize the primary antibody concentration and incubation time (overnight incubation), and amplification may be required.



Flow Cytometry (Intracellular) - Anti-LAMP2 antibody [H4B4] - Lysosome Marker (ab25631)

Overlay histogram showing THP1 cells stained with ab25631 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab25631, 0.5µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in THP1 cells fixed with methanol (5 min)/permeabilized in 0.1% PBS-Tween used under the same conditions.



Western blot - Anti-LAMP2 antibody [H4B4] -

Lysosome Marker (ab25631)

This image is of an Abreciew submitted by Daniel Rodriguez.

All lanes : Anti-LAMP2 antibody [H4B4] - Lysosome Marker (ab25631) at 1/500 dilution

Lane 1: HEK293 cell lysate at 30 µg

Lane 2: HepG2 at 30 μg **Lane 3**: THP-1 at 30 μg **Lane 4**: 3T3-L1 at 30 μl

Lane 5 : Mouse hepatocytes at 30 μl **Lane 6 :** Rat hepatocytes at 30 μl

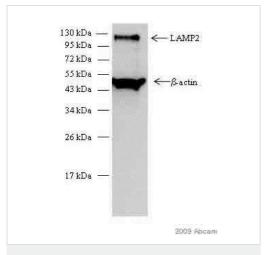
Secondary

All lanes: HRP conjugated Goat anti-Mouse IgG at 1/2000 dilution

Developed using the ECL technique.

Exposure time: 30 seconds

Along with THP-1 macrophages, other human cell lines were loaded, and the 110 kDa mature band for LAMP2 was detected in all the samples. On the other hand, mouse and rat cells were negative. The antibody works really good on human samples, detecting a single 110 kDa band but it's not suitable to use for mouse or rat samples.



Western blot - Anti-LAMP2 antibody [H4B4] -Lysosome Marker (ab25631)

This image was kindly supplied by Daniel Rodriguez by Abreview $\,$

150 KDa — Rhesus monkey RPL cell lysate — IleLa cell lysate

150 KDa — 75 KDa — 25 KDa — 20 KDa — 215 KDa — 215 KDa — 215 KDa — 20 KDa — 215 KDa — 20 KDa —

Western blot - Anti-LAMP2 antibody [H4B4] - Lysosome Marker (ab25631)

This image is courtesy of an anonymous Abreview

Anti-LAMP2 antibody [H4B4] - Lysosome Marker (ab25631) at 1/500 dilution + whole cell lysate prepared from THP-1 macrophages at 30 μg

Secondary

Goat anti-mouse IgG conjugated to HRP at 1/2000 dilution

Developed using the ECL technique.

Observed band size: 110 kDa

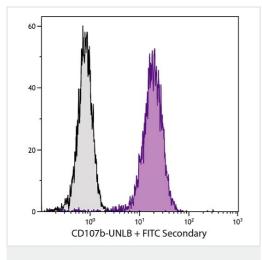
Exposure time: 30 seconds

Primary antibody incubated for 12 hours at 4°C.

Gel running conditions: 12%

Blocked with 5% milk for 1 hour at 25°C.

Western blot analysis of Rhesus monkey primary retinal pigmented epthelium whole cell lysate and HeLa cell whole cell lysate (20µg/lane) labelling LAMP2 with ab25631 at 1/1000. An alkaline phosphatase-conjugated rabbit anti-mouse IgG was used as the secondary antibody.



Intracellular Flow Cytometry analysis of Human T lymphocyte cell line Jurkat labeling LAMP2 with ab25631 at 1 μ g/10⁶ cells dilution (purple). A Goat Anti-Mouse lgG1, Human ads-FITC was used as the secondary antibody. Grey - Isotype Control, Mouse lgG1-UNLB, followed by Goat Anti-Mouse lgG1, Human ads-FITC.

Flow Cytometry (Intracellular) - Anti-LAMP2 antibody [H4B4] - Lysosome Marker (ab25631)

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