# abcam

# Product datasheet

# Anti-LAMP1 antibody [EPR4204] - Lysosome Marker ab108597





重组 RabMAb

# ★★★★★ 4 Abreviews 11 References 7 图像

## 概述

产品名称 Anti-LAMP1抗体[EPR4204] - Lysosome Marker

描述 兔单克隆抗体[EPR4204] to LAMP1 - Lysosome Marker

宿主 Rabbit

经测试应用 适用于: WB, IHC-P

不适用于: Flow Cyt,ICC/IF or IP

种属反应性 与反应: Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: HeLa, JAR, A431 and Jurkat lysates. IHC-P: human liver carcinoma and kidney tissue.

常规说明 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**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

### 性能

形式 Liquid

存放说明 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

存储溶液

Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol, 0.05% BSA

纯度 Protein A purified

克隆 单克隆 克隆编号 **EPR4204** 

## 应用

#### Abpromise™承诺保证使用ab108597于以下的经测试应用 The Abpromise guarantee

"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	* * * * * * <u>(2)</u>	1/1000 - 1/10000. Detects a band of approximately 120 kDa (predicted molecular weight: 45 kDa).
IHC-P	<b>★★★★</b> (1)	1/100 - 1/400. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

应用说明 Is unsuitable for Flow Cyt,ICC/IF or IP.

## 靶标

功能 Presents carbohydrate ligands to selectins. Also implicated in tumor cell metastasis.

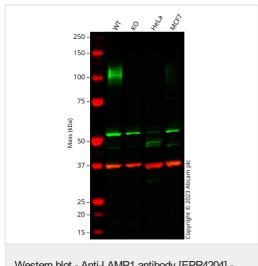
序列相似性 Belongs to the LAMP family.

翻译后修饰 O- and N-glycosylated; some of the 18 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.

## 图片



Western blot - Anti-LAMP1 antibody [EPR4204] -

Lysosome Marker (ab108597)

All lanes: Anti-LAMP1 antibody [EPR4204] - Lysosome Marker (ab108597) at 1/1000 dilution

Lane 1: Wild-type HCT 116 cell lysate

Lane 2: LAMP1 knockout HCT 116 cell lysate

Lane 3: HeLa cell lysate

Lane 4: MCF7 cell lysate

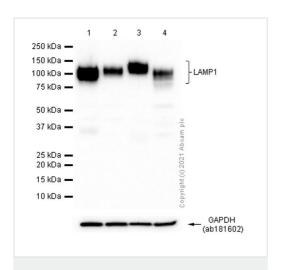
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 45 kDa

Observed band size: 100-120 kDa

staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (ab8245) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab108597 was shown to bind specifically to LAMP1. A band was observed at 100-120 kDa in wild-type HCT 116 cell lysates with no signal observed at this size in LAMP1 knockout cell line. To generate this image, wild-type and LAMP1 knockout HCT 116 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<sup>®</sup> 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.



Western blot - Anti-LAMP1 antibody [EPR4204] - Lysosome Marker (ab108597)

**All lanes :** Anti-LAMP1 antibody [EPR4204] - Lysosome Marker (ab108597) at 1/5000 dilution

Lane 1 : HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate 20µg

Lane 2 : Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate 20µg

**Lane 3 :** HepG2 (human hepatocellular carcinoma epithelial cell) whole cell lysate 20µg

**Lane 4**: MCF7 (human breast adenocarcinoma epithelial cell) whole cell lysate 20µg

## **Secondary**

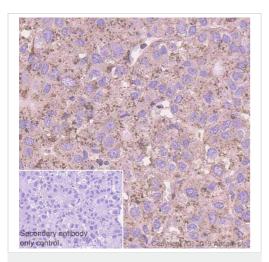
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 45 kDa

Observed band size: 110 kDa

Exposure time: 5 seconds

LAMP1 is a glycoprotein. The molecular weight observed is consistent with what has been described in the literature (PMID: 27061067, 151111122).

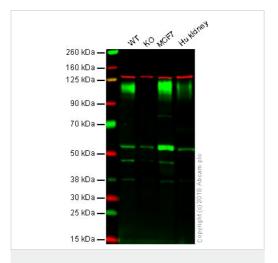


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-LAMP1 antibody

[EPR4204] - Lysosome Marker (ab108597)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver carcinoma tissue sections labeling LAMP1 with purified ab108597 at 1/400 dilution (0.36 µg/ml). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody.

Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Western blot - Anti-LAMP1 antibody [EPR4204] - Lysosome Marker (ab108597)

**All lanes :** Anti-LAMP1 antibody [EPR4204] - Lysosome Marker (ab108597) at 1/1000 dilution

Lane 1: Wild-type HAP1 whole cell lysate

Lane 2: LAMP1 knockout HAP1 whole cell lysate

Lane 3: MCF7 whole cell lysate

Lane 4: Human Kidney whole cell lysate

Lysates/proteins at 20 µg per lane.

**Predicted band size:** 45 kDa **Observed band size:** 110 kDa

**Lanes 1 - 4:** Merged signal (red and green). Green - unpurified ab108597 observed at 110 kDa. Red - loading control, **ab18058**, observed at 130 kDa.

ab108597 was shown to recognize LAMP1 in wild-type HAP1 cells as signal was lost at the expected MW in LAMP1 knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and LAMP1 knockout samples were subjected to SDS-PAGE. ab108597 and <a href="mailto:ab18058">ab18058</a> (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed <a href="mailto:ab216773">ab216773</a> and Goat anti-Mouse IgG H&L (IRDye® 680RD)

preabsorbed <u>ab216776</u> secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.

1 2 3 4

kDa
2501501505037-

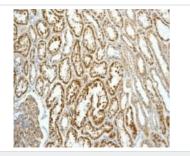
Western blot - Anti-LAMP1 antibody [EPR4204] - Lysosome Marker (ab108597)

**All lanes :** Anti-LAMP1 antibody [EPR4204] - Lysosome Marker (ab108597) at 1/1000 dilution ((unpurified))

Lane 1 : HeLa cell lysate
Lane 2 : JAR cell lysate
Lane 3 : Jurkat cell lysate
Lane 4 : A431 cell lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 45 kDa

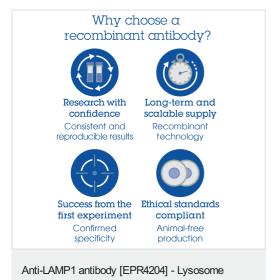


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-LAMP1 antibody

[EPR4204] - Lysosome Marker (ab108597)

Immunohistochemical analysis of LAMP1 in paraffin embedded Human kidney tissue, using unpurified ab108597 at a dilution of 1/100.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Marker (ab108597)

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