

Product datasheet

Anti-LAMP1 antibody [EPR4204] - BSA and Azide free ab247693

KO VALIDATED Recombinant RabMAb

6 Images

Overview		
Product name	Anti-LAMP1 antibody [EPR4204] - BSA and Azide free	
Description	Rabbit monoclonal [EPR4204] to LAMP1 - BSA and Azide free	
Host species	Rabbit	
Tested applications	Suitable for: IHC-P, WB Unsuitable for: Flow Cyt,ICC/IF or IP	
Species reactivity	Reacts with: Human	
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.	
Positive control	WB: HeLa, JAR, A431 and Jurkat lysates. IHC-P: human liver carcinoma and kidney tissue.	
General notes	ab247693 is the carrier-free version of <u>ab108597</u> .	
	Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.	
	This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.	
	Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.	
	This product is compatible with the Maxpar [®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar [®] is a trademark of Fluidigm Canada Inc.	
	 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 <u>see here</u>. Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <u>RabMAb[®] patents</u>. 	

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR4204
lsotype	lgG

Applications

The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab247693 in the following tested applications.

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

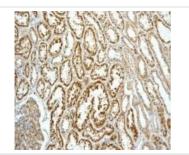
Application	Abreviews	Notes
IHC-P		1/100 - 1/400. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/1000 - 1/10000. Detects a band of approximately 120 kDa (predicted molecular weight: 45 kDa).

Application notes

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

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.

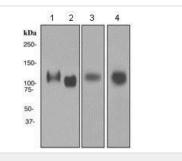
Images



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-LAMP1 antibody [EPR4204] - BSA and Azide free (ab247693) This data was developed using <u>ab108597</u>, the same antibody clone in a different buffer formulation.

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

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



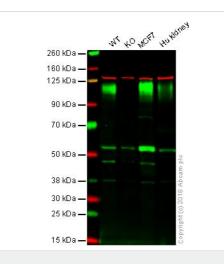
Western blot - Anti-LAMP1 antibody [EPR4204] -BSA and Azide free (ab247693) All lanes : Anti-LAMP1 antibody [EPR4204] - Lysosome Marker (ab108597)

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

This data was developed using <u>ab108597</u>, the same antibody clone in a different buffer formulation.



Western blot - Anti-LAMP1 antibody [EPR4204] -BSA and Azide free (ab247693) All lanes : Anti-LAMP1 antibody [EPR4204] - Lysosome Marker (<u>ab108597</u>) 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

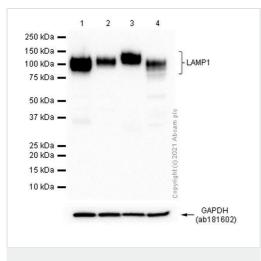
Lysates/proteins at 20 µg per lane.

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

This data was developed using <u>ab108597</u>, the same antibody clone in a different buffer formulation.

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

<u>ab108597</u> 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. <u>ab108597</u> and <u>ab18058</u> (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 <u>ab216773</u> 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.



Western blot - Anti-LAMP1 antibody [EPR4204] -BSA and Azide free (ab247693) All lanes : Anti-LAMP1 antibody [EPR4204] - Lysosome Marker (<u>ab108597</u>) at 1/5000 dilution

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

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

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

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

Lysates/proteins at 20 µg per lane.

Secondary

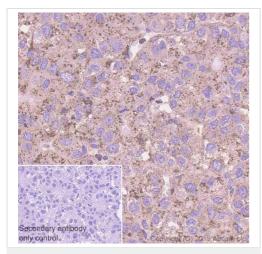
Lanes 1-3 : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution Lane 4 : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution (MCF7 (human breast adenocarcinoma epithelial cell) whole cell lysate)

Predicted band size: 45 kDa

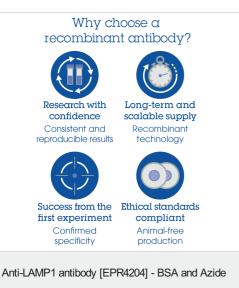
Exposure time: 5 seconds

This data was developed using <u>ab108597</u>, the same antibody clone in a different buffer formulation.

LAMP1 is a glycoprotein. The molecular weight observed is consistent with what has been described in the literature (PMID: 27061067, 15111122).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-LAMP1 antibody [EPR4204] - BSA and Azide free (ab247693)



free (ab247693)

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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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab108597</u>).

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