abcam

Product datasheet

Anti-LAMP1 antibody - Lysosome Marker ab24170

96 Abreviews 668 References 6 Images

Overview

Product name	Anti-LAMP1 antibody - Lysosome Marker
Description	Rabbit polyclonal to LAMP1 - Lysosome Marker
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, WB
Species reactivity	**Reacts with:** Human **Predicted to work with:** Mouse, Rat, Chicken, Hamster, Cow, Cat, Dog, Xenopus laevis, Monkey, Zebrafish, African green monkey
Immunogen	Synthetic peptide corresponding to Human LAMP1 aa 400 to the C-terminus (C terminal) conjugated to keyhole limpet haemocyanin. (Peptide available as **ab25744**)
General notes	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

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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.
Purity	Immunogen affinity purified

Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab24170 in the following tested applications.

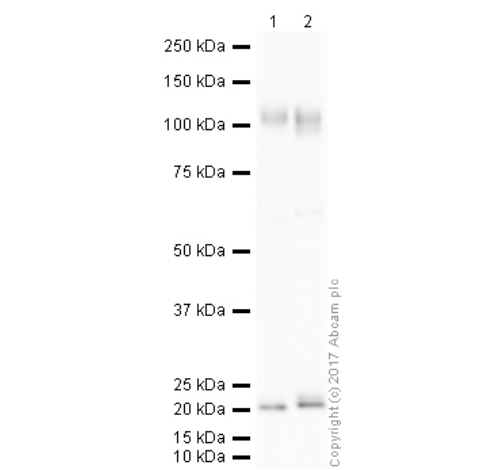
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P	★★★★★ (10)	Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
WB	★★★★☆ (37)	Use a concentration of 1 µg/ml. Detects a band of approximately 90-130 kDa (predicted molecular weight: 120 kDa). Some variability in MW may be observed due to differing levels of glycosylation of the target protein in different cell/tissue types. Abcam recommends using Milk as the blocking agent.

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



Western blot - Anti-LAMP1 antibody - Lysosome Marker (ab24170)

All lanes : Anti-LAMP1 antibody - Lysosome Marker (ab24170) at 1 µg/ml

Lane 1 : Jurkat (Human) Whole Cell Lysate
Lane 2 : HEK293 (Human) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed at 1/50000 dilution

Developed using the ECL technique.

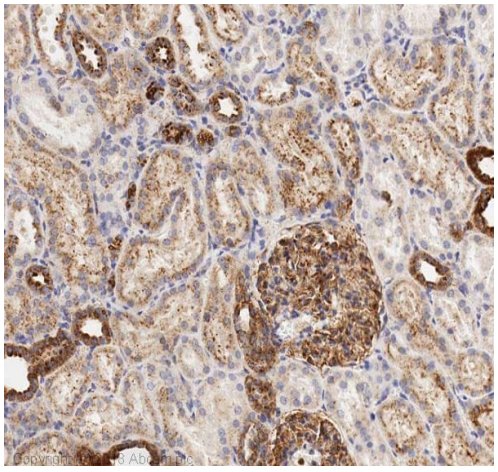
Performed under reducing conditions.

Predicted band size: 120 kDa
Observed band size: 120 kDa
Additional bands at: 20 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 8 minutes

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 3% Milk before being incubated with ab24170 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution **ab133406**.

Abcam recommends using milk as the blocking agent. Abcam welcomes customer feedback and would appreciate any comments regarding this product and the data presented above.

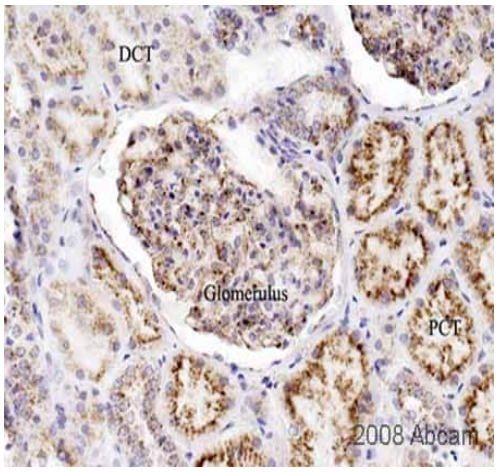


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LAMP1 antibody - Lysosome Marker (ab24170)

IHC image of LAMP1 staining in a section of formalin-fixed paraffin-embedded normal human kidney* performed on a Leica BOND™ system using the standard protocol B. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab24170, 1ug/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

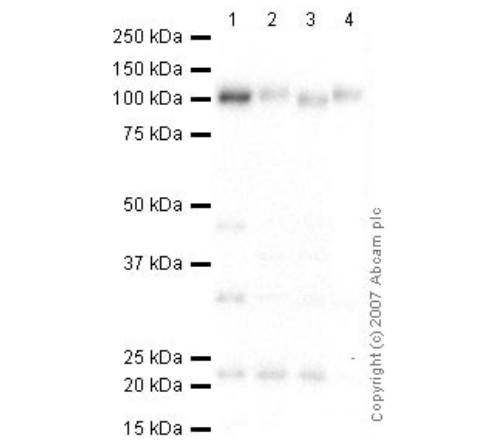
**Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre*



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LAMP1 antibody - Lysosome Marker (ab24170)

This image is courtesy of an Abreview submitted by Mr Carl Hobbs

ab24170 staining LAMP1 in human kidney tissue sections. Staining correlates with lysosomal specificity, particularly in the proximal convoluted tubules where lysosomes are enriched. Formalin/PFA-fixed human kidney tissue sections were incubated with ab24170 (1/200) for 2 hours. Antigen retrieval was performed by heat induction in citrate buffer pH 6. Please see accompanying abreview for additional information.



Western blot - Anti-LAMP1 antibody - Lysosome Marker (ab24170)

All lanes : Anti-LAMP1 antibody - Lysosome Marker (ab24170) at 1 µg/ml

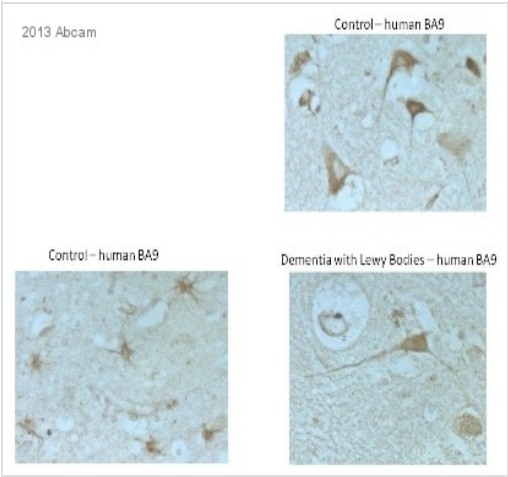
Lane 1 : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate
Lane 2 : A431 (Human epithelial carcinoma cell line) Whole Cell Lysate
Lane 3 : HEK293 Human embryonic kidney cell line Whole Cell Lysate
Lane 4 : MCF7 (Human breast adenocarcinoma cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed at 1/3000 dilution

Performed under reducing conditions.

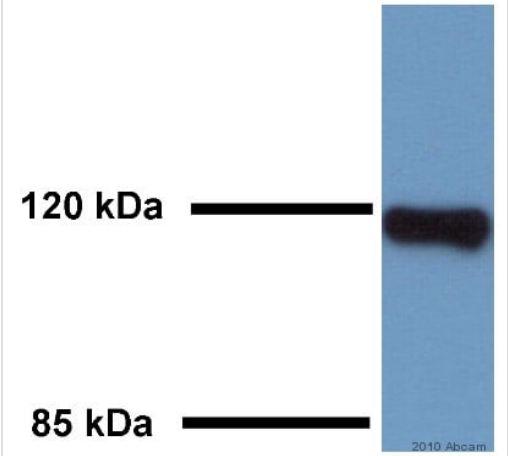
Predicted band size: 120 kDa
Observed band size: 120 kDa
Additional bands at: 23 kDa, 35 kDa, 45 kDa. We are unsure as to the identity of these extra bands.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-LAMP1 antibody - Lysosome Marker (ab24170)

This image is courtesy of an abreview submitted by Dr. Martin Broadstock (King's College London, United Kingdom)

IHC-P image of LAMP1 staining on human Cortex sections using ab24170 (1:400). The sections were deparaffinized and subjected to heat mediated antigen retreival using citric acid. The sections were then permeabilized using 0.05% Tween-20 and blocking was performed using 3% BSA for 1 hour at 21°C. The primary antibody ab24170 was diluted using 3% BSA with 0.05% Tween-20 in PBS and incubated with the sections for 18 hours at 4°C. The secondary antibody used was Goat polyclonal to rabbit IgG conjugated to biotin (1:500)



Western blot - Anti-LAMP1 antibody - Lysosome Marker (ab24170)

This image is courtesy of an anonymous Abreview

Anti-LAMP1 antibody - Lysosome Marker (ab24170) at 1/700 dilution (in 5% milk for 4 hours at 20°C) + Rat Kidney - whole tissue lysate at 18 µg

Secondary
An HRP-conjugated Goat anti-rabbit IgG polyclonal at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 120 kDa
Observed band size: 120 kDa

Exposure time: 5 minutes

Blocking Step: 5% Milk for 1 hour at 20°C

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