

## Product datasheet

# Anti-Clathrin light chain antibody [EPR24231-72] ab271185

KO VALIDATED Recombinant RabMAb

14 Images

### Overview

Product name	Anti-Clathrin light chain antibody [EPR24231-72]
Description	Rabbit monoclonal [EPR24231-72] to Clathrin light chain
Host species	Rabbit
Tested applications	<b>Suitable for:</b> IHC-P, Flow Cyt (Intra), WB, IP, ICC/IF
Species reactivity	<b>Reacts with:</b> Mouse, Rat, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HeLa, HEK-293, NCI-H1299, MEF, C2C12, PC-12 and C6 whole cell lysates. Human Clathrin light chain recombinant protein. IHC-P: Human cerebrum tissue; Mouse cerebrum tissue; Rat cerebrum tissue. ICC/IF: MEF, HeLa and C2C12 cells. Flow Cyt-intra: HeLa and C2C12 cells. IP: HeLa and MEF whole cell lysates.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

### 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. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59.94% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified

<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR24231-72
<b>Isotype</b>	IgG

## Applications

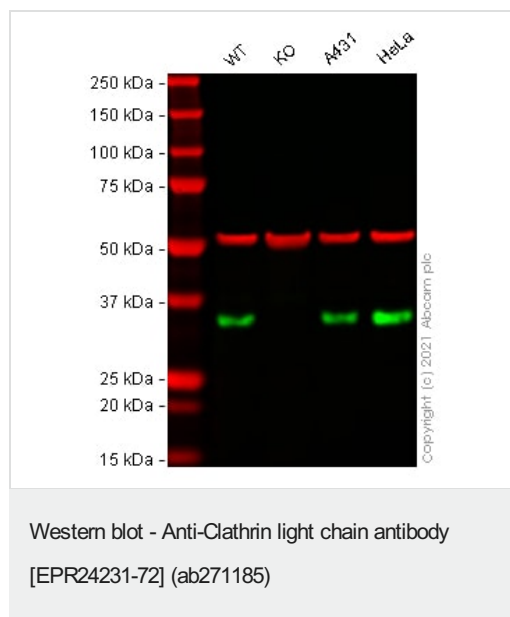
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab271185 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
<b>IHC-P</b>		1/5000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
<b>Flow Cyt (Intra)</b>		1/500.
<b>WB</b>		1/1000. Detects a band of approximately 35 kDa (predicted molecular weight: 27 kDa).
<b>IP</b>		1/30.
<b>ICC/IF</b>		1/250.

## Target

<b>Function</b>	Clathrin is the major protein of the polyhedral coat of coated pits and vesicles.
<b>Cellular localization</b>	Cytoplasmic vesicle membrane. Membrane > coated pit. Cytoplasmic face of coated pits and vesicles.

## Images



**All lanes :** Anti-Clathrin light chain antibody [EPR24231-72] (ab271185) at 1/1000 dilution

**Lane 1 :** Wild-type HEK-293T cell lysate

**Lane 2 :** CLTA knockout HEK-293T cell lysate

**Lane 3 :** A431 cell lysate

**Lane 4 :** HeLa cell lysate

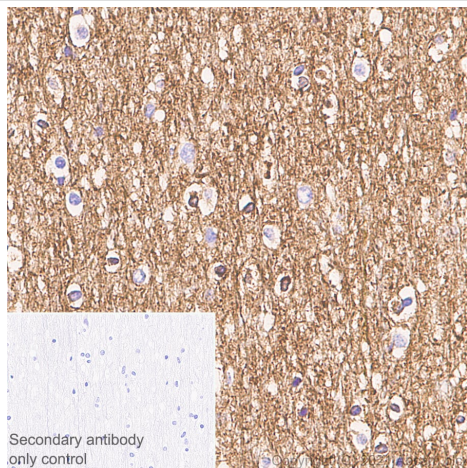
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 27 kDa

**Observed band size:** 35 kDa

False colour image of Western blot: Anti-Clathrin light chain antibody [EPR24231-72] staining at 1/1000 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] ([ab7291](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab271185 was shown to bind specifically to Clathrin light chain. A band was observed at 35 kDa in wild-type HEK-293T cell lysates with no signal observed at this size in CLTA knockout cell line [ab267334](#) (knockout cell lysate [ab258366](#)). To generate this image, wild-type and CLTA knockout HEK-293T 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 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 (IRDye<sup>®</sup> 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye<sup>®</sup> 680RD) preabsorbed ([ab216776](#)) at 1/20000 dilution.

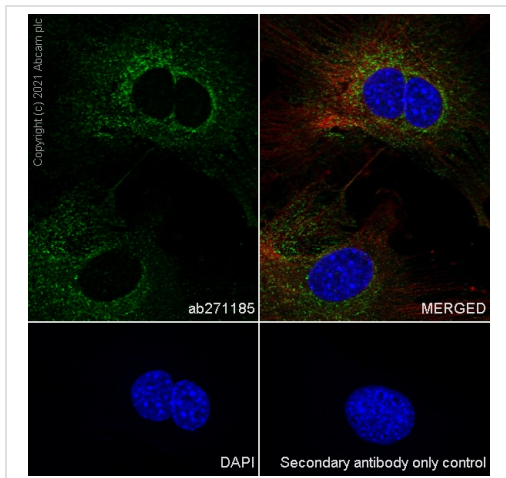


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Clathrin light chain antibody [EPR24231-72] (ab271185)

Immunohistochemical analysis of paraffin-embedded Human cerebrum tissue labelling Clathrin light chain with ab271185 at 1/5000 (0.102 ug/ml) dilution followed by a ready to use LeicaDS9800 (Bond<sup>™</sup> Polymer Refine Detection). Cytoplasmic staining in human cerebrum. The section was incubated with ab271185 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND<sup>®</sup> RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond<sup>™</sup> Polymer Refine Detection).

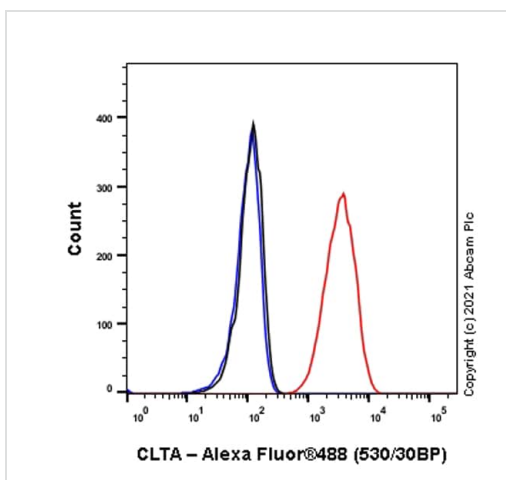
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Immunocytochemistry/ Immunofluorescence - Anti-Clathrin light chain antibody [EPR24231-72] (ab271185)

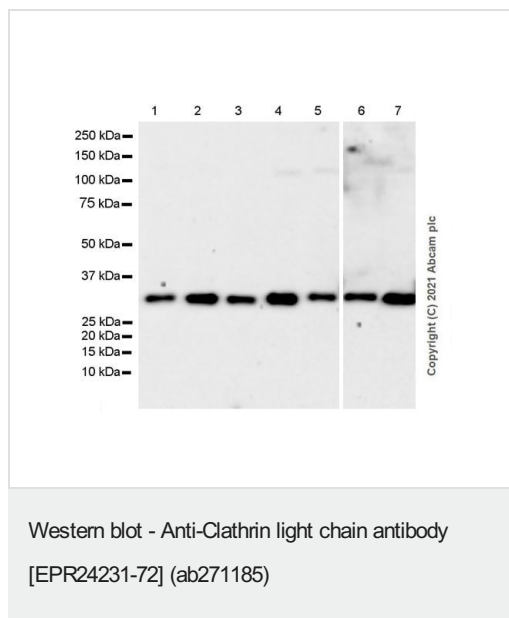
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized MEF cells labelling Clathrin light chain with ab271185 at 1/250 (2.036 ug/ml) dilution, followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining in MEF cells is observed. **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.



Flow Cytometry (Intracellular) - Anti-Clathrin light chain antibody [EPR24231-72] (ab271185)

Flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized HeLa (Human cervix adenocarcinoma cell) cells labelling Clathrin light chain with ab271185 at 1/500 dilution (0.1ug)(Red) compared with a Rabbit monoclonal IgG (**ab172730**) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) at 1/2000 dilution was used as the secondary antibody.



**All lanes :** Anti-Clathrin light chain antibody [EPR24231-72] (ab271185) at 1/1000 dilution

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

**Lane 2 :** HEK-293 (human embryonic kidney epithelial cell) whole cell lysate

**Lane 3 :** NCI-H1299 (human lung carcinoma epithelial cell) whole cell lysate

**Lane 4 :** MEF (mouse embryonic fibroblast (immortalized)) whole cell lysate

**Lane 5 :** C2C12 (mouse myoblasts myoblast) whole cell lysate

**Lane 6 :** PC-12 (rat adrenal gland pheochromocytoma) whole cell lysate

**Lane 7 :** C6 (rat glial tumor glial cell) whole cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/50000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

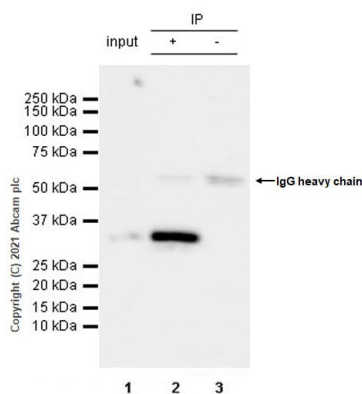
**Predicted band size:** 27 kDa

**Observed band size:** 35 kDa

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

The observed MW is consistent with what has been described in the literature (PMID: 31672988, 24852344).

Exposure time: 70 seconds.



Immunoprecipitation - Anti-Clathrin light chain antibody [EPR24231-72] (ab271185)

Clathrin light chain was immunoprecipitated from 0.35 mg HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate with ab271185 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab271185 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP) ([ab131366](#)) was used at 1/5000 dilution.

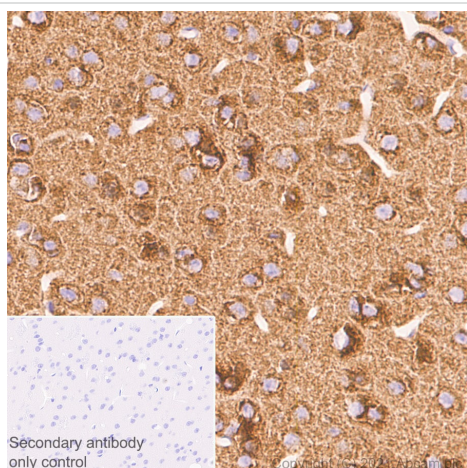
**Lane 1:** HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate 10 ug

**Lane 2:** ab271185 IP in HeLa whole cell lysate

**Lane 3:** Rabbit monoclonal IgG ([ab172730](#)) instead of ab271185 in HeLa whole cell lysate

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

Exposure time: 32 seconds

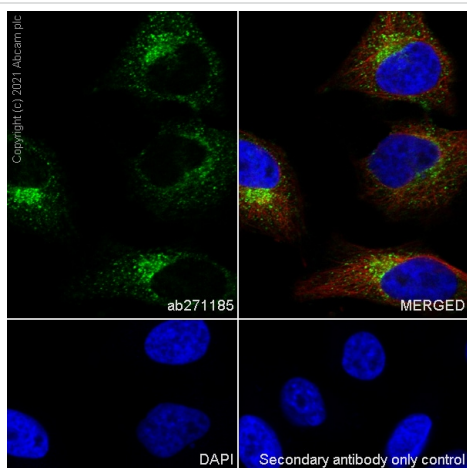


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Clathrin light chain antibody [EPR24231-72] (ab271185)

Immunohistochemical analysis of paraffin-embedded Mouse cerebrum tissue labelling Clathrin light chain with ab271185 at 1/5000 (0.102 ug/ml) dilution followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Cytoplasmic staining in mouse cerebrum. The section was incubated with ab271185 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

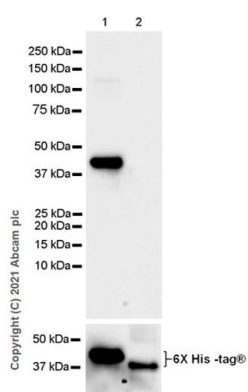
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Immunocytochemistry/ Immunofluorescence - Anti-Clathrin light chain antibody [EPR24231-72] (ab271185)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized HeLa cells labelling Clathrin light chain with ab271185 at 1/250 (2.036 ug/ml) dilution, followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining in HeLa cells is observed. **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.



Western blot - Anti-Clathrin light chain antibody [EPR24231-72] (ab271185)

**All lanes :** Anti-Clathrin light chain antibody [EPR24231-72] (ab271185) at 1/1000 dilution

**Lane 1 :** Human Clathrin light chain recombinant protein

**Lane 2 :** Human CLTB recombinant protein

Lysates/proteins at 0.01 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

**Predicted band size:** 27 kDa

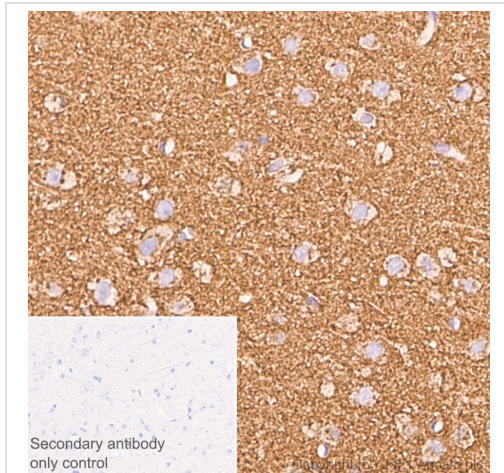
**Observed band size:** 35 kDa

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



This antibody does not recognize human CLTB.

Exposure time: 70 seconds.

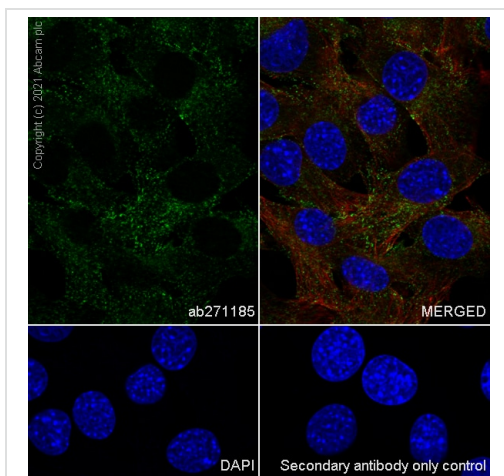


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Clathrin light chain antibody [EPR24231-72] (ab271185)

Immunohistochemical analysis of paraffin-embedded Rat cerebrum tissue labelling Clathrin light chain with ab271185 at 1/5000 (0.102 ug/ml) dilution followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Cytoplasmic staining in rat cerebrum. The section was incubated with ab271185 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

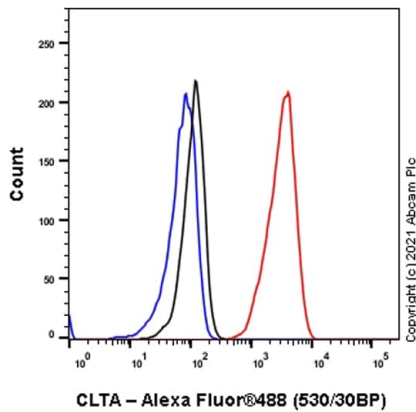


Immunocytochemistry/ Immunofluorescence - Anti-Clathrin light chain antibody [EPR24231-72] (ab271185)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized C2C12 cells labelling Clathrin light chain with ab271185 at 1/250 (2.036 ug/ml) dilution, followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining in C2C12 cells is observed. **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

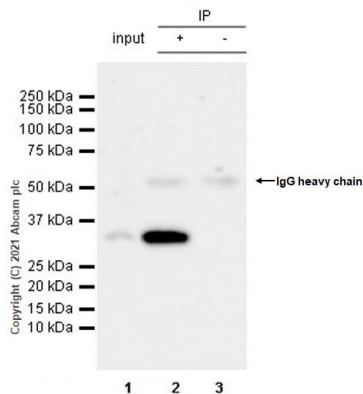
Secondary antibody only control: Secondary antibody is **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.





Flow Cytometry (Intracellular) - Anti-Clathrin light chain antibody [EPR24231-72] (ab271185)

Flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized C2C12 (Mouse myoblasts myoblast) cells labelling Clathrin light chain with ab271185 at 1/500 dilution (0.1ug) (Red) compared with a Rabbit monoclonal IgG (**ab172730**) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) at 1/2000 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-Clathrin light chain antibody [EPR24231-72] (ab271185)

Clathrin light chain was immunoprecipitated from 0.35 mg MEF (mouse embryonic fibroblast (immortalized)) whole cell lysate with ab271185 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab271185 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP) (**ab131366**) was used at 1/5000 dilution.

**Lane 1:** MEF (mouse embryonic fibroblast (immortalized)) whole cell lysate 10 ug

**Lane 2:** ab271185 IP in MEF whole cell lysate

**Lane 3:** Rabbit monoclonal IgG (**ab172730**) instead of ab271185 in MEF whole cell lysate

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

Exposure time: 32 seconds

### 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-Clathrin light chain antibody [EPR24231-72]  
(ab271185)

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

### Our Abpromise to you: Quality guaranteed and expert technical support

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- 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.com/abpromise> or contact our technical team.

### Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors