


Product datasheet

Anti-ATG4A antibody [EPR4122] ab108322

KO VALIDATED Recombinant RabMAB[®]

[10 References](#) [5 Images](#)

Overview

| | |
|----------------------------|--|
| Product name | Anti-ATG4A antibody [EPR4122] |
| Description | Rabbit monoclonal [EPR4122] to ATG4A |
| Host species | Rabbit |
| Tested applications | Suitable for: WB, IHC-P Unsuitable for: Flow Cyt or ICC/IF |
| Species reactivity | Reacts with: Human Predicted to work with: Mouse, Rat  |
| Immunogen | Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. |
| Positive control | Fetal liver, HeLa, Daudi, HepG2, Jurkat and fetal brain lysates. Human brain tissue and Human skeletal muscle tissue. |
| General notes | This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - 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 . |

Properties

| | |
|-----------------------------|---|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C. |
| Storage buffer | pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant |
| Purity | Tissue culture supernatant |
| Clonality | Monoclonal |

Clone number EPR4122
Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab108322 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 |
|-------------|-----------|--|
| WB | | 1/1000 - 1/10000. Predicted molecular weight: 45 kDa. |
| IHC-P | | 1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Perform antigen retrieval. |

Application notes Is unsuitable for Flow Cyt or ICC/IF.

Target

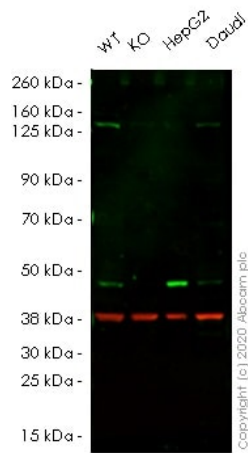
Function Cysteine protease required for autophagy, which cleaves the C-terminal part of either MAP1LC3, GABARAPL2 or GABARAP, allowing the liberation of form I. A subpopulation of form I is subsequently converted to a smaller form (form II). Form II, with a revealed C-terminal glycine, is considered to be the phosphatidylethanolamine (PE)-conjugated form, and has the capacity for the binding to autophagosomes. Preferred substrate is GABARAPL2 followed by MAP1LC3A and GABARAP.

Tissue specificity Widely expressed, at a low level, and the highest expression is observed in skeletal muscle and brain. Also detected in fetal liver.

Sequence similarities Belongs to the peptidase C54 family.

Cellular localization Cytoplasm.

Images



Western blot - Anti-ATG4A antibody [EPR4122] (ab108322)

All lanes : Anti-ATG4A antibody [EPR4122] (ab108322) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : ATG4A knockout HeLa cell lysate

Lane 3 : HepG2 cell lysate

Lane 4 : Daudi cell lysate

Lysates/proteins at 20 µg per lane.

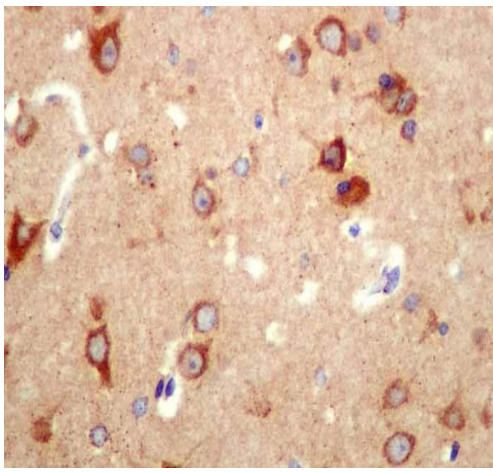
Performed under reducing conditions.

Predicted band size: 45 kDa

Observed band size: 45 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab108322 observed at 45 kDa. Red - loading control **ab8245** (Mouse anti-GAPDH antibody [6C5]) observed at 37 kDa.

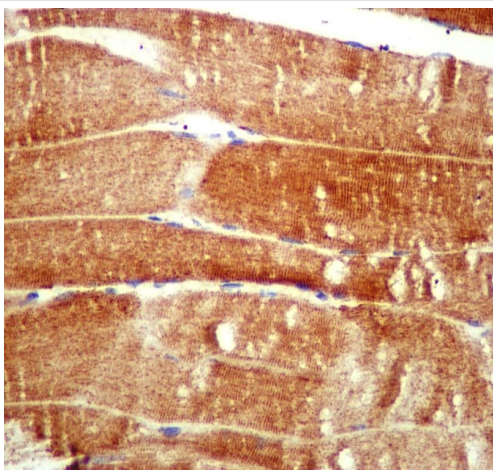
ab108322 was shown to react with ATG4A in wild-type HeLa cells in Western blot with loss of signal observed in ATG4A knockout cell line **ab265738** (ATG4A knockout cell lysate **ab257846**). Wild-type HeLa and ATG4A knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3 % milk in TBS-T (0.1 % Tween[®]) before incubation with ab108322 and **ab8245** (Mouse anti-GAPDH antibody [6C5]) overnight at 4 °C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye[®] 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye[®] 680RD) preabsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ATG4A antibody [EPR4122] (ab108322)

Immunohistochemical analysis of paraffin-embedded Human brain tissue using ab108322 at 1/100 dilution.

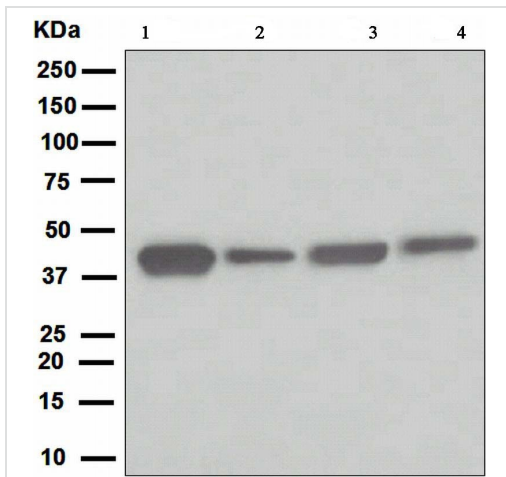
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ATG4A antibody [EPR4122] (ab108322)

Immunohistochemical analysis of paraffin-embedded Human skeletal muscle tissue using ab108322 at 1/100 dilution.

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



Western blot - Anti-ATG4A antibody [EPR4122] (ab108322)

All lanes : Anti-ATG4A antibody [EPR4122] (ab108322) at 1/1000 dilution

Lane 1 : Fetal liver tissue lysate

Lane 2 : HepG2 cell lysate

Lane 3 : Jurkat cell lysate

Lane 4 : Fetal brain tissue lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Standard HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 45 kDa

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-ATG4A antibody [EPR4122] (ab108322)

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

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