


### Anti-ATG3 antibody [EPR4801] ab108251

KO 評価済 リコンビナント RabMAb

★★★★☆ 7 Abreviews 18 References 画像数 6

#### 製品の概要

|              |  |
|--------------|--|
| 製品名          | Anti-ATG3 antibody [EPR4801]   |
| 製品の詳細        | Rabbit monoclonal [EPR4801] to ATG3  |
| 由来種          | Rabbit   |
| アプリケーション     | <b>適用あり:</b> WB, IHC-P, Flow Cyt (Intra), ICC/IF<br><b>適用なし:</b> IP  |
| 種交差性         | <b>交差種:</b> Human<br><b>交差が予測される動物種:</b> Mouse, Rat   |
| 免疫原          | Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.  |
| ポジティブ・コントロール | WB: HEK293T, K562, HL-60, HeLa or Jurkat whole cell lysate ( <a href="#">ab7899</a> ). IHC-P: Human muscle tissue. ICC/IF: HeLa cells. Flow Cyt (intra): HeLa cells.   |
| 特記事項         | This product is a recombinant monoclonal antibody, which offers several advantages including: <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> For more information <a href="#">see here</a> .<br>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> . |

#### 製品の特性

|       |  |
|-------|--|
| 製品の状態 | Liquid   |
| 保存方法  | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.                                    |
| バッファー | pH: 7.20<br>Preservative: 0.05% Sodium azide<br>Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant |
| 精製度   | Protein A purified   |
| ポリ/モノ | モノクローナル  |

|        |         |
|--------|---------|
| クローン名  | EPR4801 |
| アイソタイプ | IgG     |

## アプリケーション

**The Abpromise guarantee**      Abpromise保証は、 次のテスト済みアプリケーションにおけるab108251の使用に適用されます  
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご確認ください。

| アプリケーション         | Abreviews | 特記事項  |
|------------------|-----------|---|
| WB               | ★★★★★ (2) | 1/10000 - 1/50000. Detects a band of approximately 40 kDa (predicted molecular weight: 36 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 before commencing with IHC staining protocol. |
| Flow Cyt (Intra) |           | 1/2000.   |
| ICC/IF           | ★★★★★ (3) | 1/100 - 1/250.  |

追加情報 Is unsuitable for IP.

## ターゲット情報

**機能** E2-like enzyme involved in autophagy and mitochondrial homeostasis. Catalyzes the conjugation of ATG8-like proteins (GABARAP, GABARAPL1, GABARAPL2 or MAP1LC3A) to phosphatidylethanolamine (PE). PE-conjugation to ATG8-like proteins is essential for autophagy. Preferred substrate is MAP1LC3A. Also acts as an autocatalytic E2-like enzyme, catalyzing the conjugation of ATG12 to itself, ATG12 conjugation to ATG3 playing a role in mitochondrial homeostasis but not in autophagy. ATG7 (E1-like enzyme) facilitates this reaction by forming an E1-E2 complex with ATG3.

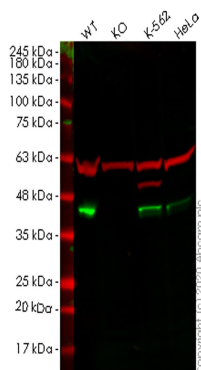
|       |  |
|-------|--|
| 組織特異性 | Widely expressed, with a highest expression in heart, skeletal muscle, kidney, liver and placenta. |
|-------|--|

**配列類似性** Belongs to the ATG3 family.

**翻訳後修飾** Conjugated to ATG12 at Lys-243. ATG12-conjugation plays a role in regulation of mitochondrial homeostasis and cell death, while it is not involved in PE-conjugation to ATG8-like proteins and autophagy.

**細胞内局在** Cytoplasm.

## 画像



Western blot - Anti-ATG3 antibody [EPR4801]  
(ab108251)

**All lanes :** Anti-ATG3 antibody [EPR4801] (ab108251) at 1/1000 dilution

**Lane 1 :** Wild-type HEK293T cell lysate

**Lane 2 :** ATG3 knockout HEK293T cell lysate

**Lane 3 :** K-562 cell lysate

**Lane 4 :** HeLa cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

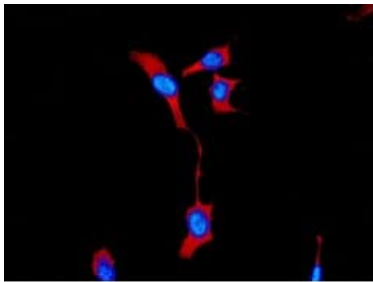
**All lanes :** Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) at 1/10000 dilution

**Predicted band size:** 36 kDa

**Observed band size:** 40 kDa

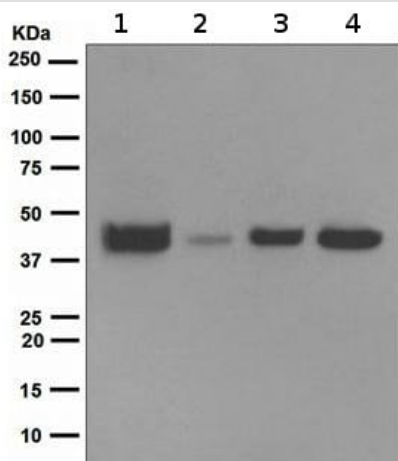
**Lanes 1-4:** Merged signal (red and green). Green - ab108251 observed at 40 kDa. Red - loading control **ab7291** observed at 50 kDa.

ab108251 Anti-ATG3 antibody [EPR4801] was shown to specifically react with ATG3 in wild-type HEK293T cells. Loss of signal was observed when knockout cell line **ab266707** (knockout cell lysate **ab257363**) was used. Wild-type and ATG3 knockout samples were subjected to SDS-PAGE. ab108251 and Anti-alpha Tubulin antibody [DM1A] - Loading Control (**ab7291**) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-ATG3 antibody [EPR4801] (ab108251)

Immunofluorescent staining of HeLa cells using ab108251 at 1/100.



Western blot - Anti-ATG3 antibody [EPR4801] (ab108251)

**All lanes :** Anti-ATG3 antibody [EPR4801] (ab108251) at 1/10000 dilution

**Lane 1 :** K562 cell lysate

**Lane 2 :** HL-60 cell lysate

**Lane 3 :** HeLa cell lysate

**Lane 4 :** Jurkat cell lysate

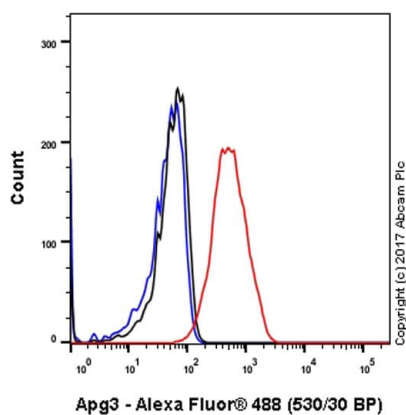
Lysates/proteins at 10 µg per lane.

#### Secondary

**All lanes :** HRP labelled goat anti-rabbit

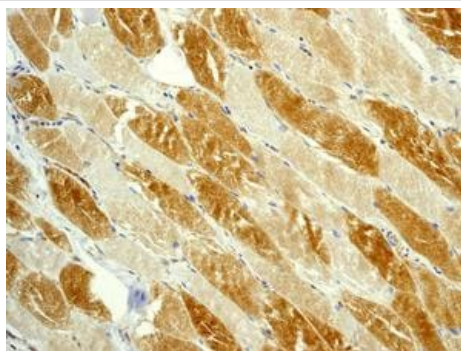
**Predicted band size:** 36 kDa

**Observed band size:** 40 kDa



Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling ATG3 (red) with ab108251 at a 1/2000 dilution. Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol. A goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) was used as the secondary antibody at a 1/2000 dilution. Black - Rabbit monoclonal IgG (**ab172730**). Blue (unlabeled control) - Cells without incubation with the primary and secondary antibodies.

Flow Cytometry (Intracellular) - Anti-ATG3 antibody  
[EPR4801] (ab108251)



ab108251, at a 1/100 dilution, staining Human ATG3 in muscle, using Immunohistochemistry, Formalin/PFA-fixed paraffin-embedded tissue.

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

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ATG3 antibody  
[EPR4801] (ab108251)

### 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-ATG3 antibody [EPR4801] (ab108251)

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

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