# abcam

## Product datasheet

## Anti-ATG16L1 antibody [5H9A11] ab233796



画像数8

## 製品の概要

製品名 Anti-ATG16L1 antibody [5H9A11]

製品の詳細 Mouse monoclonal [5H9A11] to ATG16L1

由来種 Mouse

**アプリケーション 適用あり:** WB, Flow Cyt

種交差性 交差種: Mouse, Rat, Human

免疫原 Recombinant fragment corresponding to Human ATG16L1 aa 11-257. Expressed in E.coli.

Database link: Q676U5

ポジティブ・コントロール WB: Recombinant human ATG16L1 (aa 11-257) protein; ATG16L1 (aa 11-257)-hlgG-Fc-

transfected HEK-293 cell lysate; HeLa, Raji, PANC-1, Jurkat, Daudi, PC-12, HepG2, HEK-293 and NIH/3T3 cell lysates, Wild-type THP-1 cell lysate, Wild type HeLa cell lysate. Flow cyt: HeLa

cells.

**特記事項**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

#### 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 long

term. Avoid freeze / thaw cycle.

パッファー Preservative: 0.05% Sodium azide

Constituent: PBS

精製度 Protein G purified

特記事項(精製) Purified from tissue culture supernatant.

**ポリ/モノ** モノクローナル

1

**クローン名** 5H9A11 p**イソタイプ** lgG1

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab233796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検討ください。

アプリケーション	Abreviews	特記事項
WB		1/500 - 1/2000. Predicted molecular weight: 68 kDa.
Flow Cyt		1/200 - 1/400.

#### ターゲット情報

機能 Plays an essential role in autophagy: interacts with ATG12-ATG5 to mediate the conjugation of

phosphatidylethanolamine (PE) to LC3 (MAP1LC3A, MAP1LC3B or MAP1LC3C), to produce a membrane-bound activated form of LC3 named LC3-II. Thereby, controls the elongation of the

nascent autophagosomal membrane.

**関連疾患** Inflammatory bowel disease 10

配列類似性 Belongs to the WD repeat ATG16 family.

Contains 7 WD repeats.

翻訳後修飾 Proteolytic cleavage by activated CASP3 leads to degradation and may regulate autophagy upon

cellular stress and apoptotic stimuli.

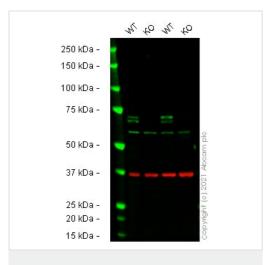
**細胞内局在** Cytoplasm. Preautophagosomal structure membrane. Recruited to omegasomes membranes by

WIPI2. Omegasomes are endoplasmic reticulum connected strutures at the origin of preautophagosomal structures. Localized to preautophagosomal structure (PAS) where it is involved in the membrane targeting of ATG5. Localizes also to discrete punctae along the ciliary

axoneme.

製品の状態 There are 4 isoforms produced by alternative splicing.

### 画像



Western blot - Anti-ATG16L1 antibody [5H9A11] (ab233796)

**All lanes :** Anti-ATG16L1 antibody [5H9A11] (ab233796) at 1/500 dilution

Lane 1: Wild-type THP-1 cell lysate

Lane 2: ATG16L1 knockout THP-1 cell lysate

Lane 3: Wild type HeLa cell lysate

Lane 4: ATG16L1 knockout HeLa cell lysate

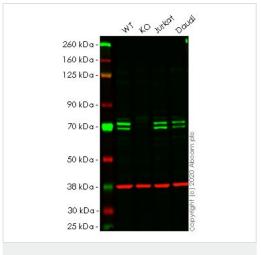
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 68 kDa **Observed band size:** 68,70 kDa

False colour image of Western blot: Anti-ATG16L1 antibody [5H9A11] staining at 1/500 dilution, shown in green; Rabbit Anti-GAPDH antibody [EPR16891] (ab181602) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab233796 was shown to bind specifically to ATG16L1. A band was observed at 68/70 kDa in wild-type THP-1 cell lysates with no signal observed at this size in ATG16L1 knockout cell line ab277834 (knockout cell lysate ab278184). To generate this image, wild-type and ATG16L1 knockout THP-1 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in fluorescent western blot (TBS-based) blocking solution before incubation with primary 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-Mouse IgG H&L (IRDye® 800CW) preabsorbed (ab216772) and Goat anti-Rabbit lgG H&L (IRDye® 680RD)

preabsorbed (ab216777) at 1/20000 dilution.



Western blot - Anti-ATG16L1 antibody [5H9A11] (ab233796)

**All lanes :** Anti-ATG16L1 antibody [5H9A11] (ab233796) at 1/1000 dilution

Lane 1: Wild-type HeLa cell lysate

Lane 2: ATG16L1 knockout HeLa cell lysate

Lane 3 : Jurkat cell lysate

Lane 4 : Daudi cell lysate

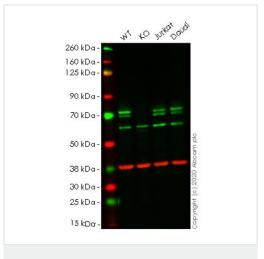
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 68 kDa **Observed band size:** 68 kDa

**Lanes 1-4:** Merged signal (red and green). Green - ab233796 observed at 68 kDa. Red - Anti-GAPDH antibody[EPR16891] - Loading Control (ab181602) observed at 37 kDa.

ab233796 was shown to react with ATG16L1 in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line <a href="mailto:ab265263">ab265263</a> (knockout cell lysate <a href="mailto:ab256842">ab256842</a>) was used. Wild-type HeLa and ATG16L1 knockout HeLa cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab233796 and Anti-GAPDH antibody[EPR16891] - Loading Control (<a href="mailto:ab181602">ab181602</a>) overnight at 4°C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye®800CW) preadsorbed (<a href="mailto:ab216772">ab216772</a>) and Goat Anti-Rabbit IgG H&L (IRDye®680RD) preadsorbed (<a href="mailto:ab216777">ab216777</a>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-ATG16L1 antibody [5H9A11] (ab233796)

**All lanes :** Anti-ATG16L1 antibody [5H9A11] (ab233796) at 1/500 dilution

Lane 1: Wild-type HeLa cell lysate

Lane 2: ATG16L1 knockout HeLa cell lysate

Lane 3 : Jurkat cell lysate

Lane 4 : Daudi cell lysate

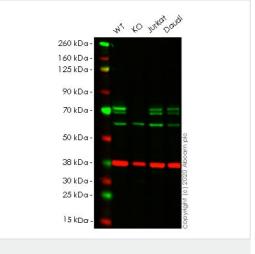
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 68 kDa **Observed band size:** 68,72 kDa

**Lanes 1-4:** Merged signal (red and green). Green - ab233796 observed at 68 and 72 kDa. Red - loading control **ab181602** observed at 37 kDa.

ab233796 Anti-ATG16L1 antibody [5H9A11] was shown to specifically react with ATG16L1 in wild-type HeLa cells. Loss of signal was observed when knockout cell line <a href="mailto:ab261773">ab261773</a> (knockout cell lysate <a href="mailto:ab256844">ab256844</a>) was used. Wild-type and ATG16L1 knockout samples were subjected to SDS-PAGE. ab233796 and Anti-GAPDH antibody[EPR16891] - Loading Control (<a href="mailto:ab181602">ab181602</a>) were incubated overnight at 4°C at 1 in 500 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preadsorbed (<a href="mailto:ab216772">ab216772</a>) and Goat Anti-Rabbit IgG H&L (IRDye® 680RD) preadsorbed (<a href="mailto:ab216777">ab216777</a>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-ATG16L1 antibody [5H9A11] (ab233796)

**All lanes :** Anti-ATG16L1 antibody [5H9A11] (ab233796) at 1/500 dilution

Lane 1: Wild-type HeLa cell lysate

Lane 2: ATG16L1 knockout HeLa cell lysate

Lane 3 : Jurkat cell lysate
Lane 4 : Daudi cell lysate

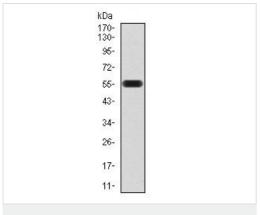
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 68 kDa **Observed band size:** 68,72 kDa

**Lanes 1-4:** Merged signal (red and green). Green - ab233796 observed at 68 and 72 kDa. Red - loading control **ab181602** observed at 37 kDa.

ab233796 Anti-ATG16L1 antibody [5H9A11] was shown to specifically react with ATG16L1 in wild-type HeLa cells. Loss of signal was observed when knockout cell line <a href="mailto:ab261772">ab261772</a> (knockout cell lysate <a href="mailto:ab256843">ab256843</a>) was used. Wild-type and ATG16L1 knockout samples were subjected to SDS-PAGE. ab233796 and Anti-GAPDH antibody[EPR16891] - Loading Control (<a href="mailto:ab181602">ab181602</a>) were incubated overnight at 4°C at 1 in 500 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Mouse lgG H&L (IRDye® 800CW) preadsorbed (<a href="mailto:ab216772">ab216772</a>) and Goat Anti-Rabbit lgG H&L (IRDye® 680RD) preadsorbed (<a href="mailto:ab216777">ab216777</a>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

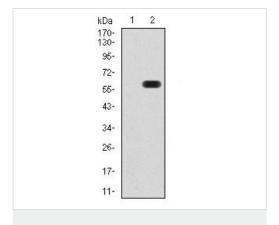


Western blot - Anti-ATG16L1 antibody [5H9A11] (ab233796)

Anti-ATG16L1 antibody [5H9A11] (ab233796) at 1/500 dilution + Recombinant human ATG16L1 (aa 11-257) protein

Predicted band size: 68 kDa

Expected MW is 56 kDa.



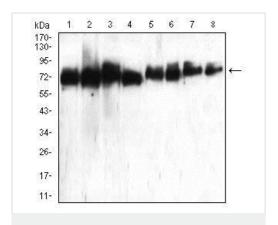
Western blot - Anti-ATG16L1 antibody [5H9A11] (ab233796)

**All lanes :** Anti-ATG16L1 antibody [5H9A11] (ab233796) at 1/500 dilution

**Lane 1 :** Untransfected HEK-293 (human epithelial cell line from embryonic kidney) cell lysate

**Lane 2**: ATG16L1 (aa 11-257)-hlgG-Fc-transfected HEK-293 cell lysate

Predicted band size: 68 kDa



Western blot - Anti-ATG16L1 antibody [5H9A11] (ab233796)

**All lanes :** Anti-ATG16L1 antibody [5H9A11] (ab233796) at 1/500 dilution

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

Lane 2: Raji (human Burkitt's lymphoma cell line) cell lysate

Lane 3 : PANC-1 (human pancreatic epithelial cancinoma cell line) cell lysate

Lane 4: Jurkat (human T cell leukemia cell line from peripheral blood) cell lysate

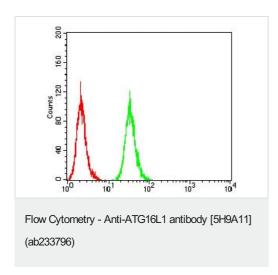
Lane 5 : PC-12 (rat adrenal gland pheochromocytoma cell line) cell lysate

Lane 6 : HepG2 (human liver hepatocellular carcinoma cell line) cell lvsate

**Lane 7 :** HEK-293 (human epithelial cell line from embryonic kidney) cell lysate

Lane 8: NIH/3T3 (mouse embryo fibroblast cell line) cell lysate

#### Predicted band size: 68 kDa



Flow cytometric analysis of HeLa (human epithelial cell line from cervix adenocarcinoma) cells labeling ATG16L1 with ab233796 at 1/200 dilution (green) compared with a negative control (red).

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