abcam

Product datasheet

Anti-APG5L/ATG5 antibody [EPR1755(2)] - BSA and Azide free ab221604

KO 評価済 リコンビナント RabMAb

14 References 画像数 7

製品の概要

製品名	Anti-APG5L/ATG5 antibody [EPR1755(2)] - BSA and Azide free
製品の詳細	Rabbit monoclonal [EPR1755(2)] to APG5L/ATG5 - BSA and Azide free
由来種	Rabbit
アプリケーション	**適用あり:** ICC/IF, IP, WB, IHC-P
種交差性	**交差種:** Mouse, Rat, Human
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	Raji, HeLa, HT-1080, Human fetal kidney, C6, Raw264.7, PC-12 and NIH3T3 cell lysates; Human hepatocellular carcinoma and Human ovarian adenocarcinoma tissue
特記事項	ab221604 is the carrier-free version of **ab108327**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. This product is a recombinant monoclonal antibody, which offers several advantages including: - 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**.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C. Do Not Freeze.
バッファー	pH: 7.2 Constituent: PBS
キャリア・フリー	はい
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR1755(2)
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ab221604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
ICC/IF		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 32 kDa.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. Antigen retrieval is recommended.

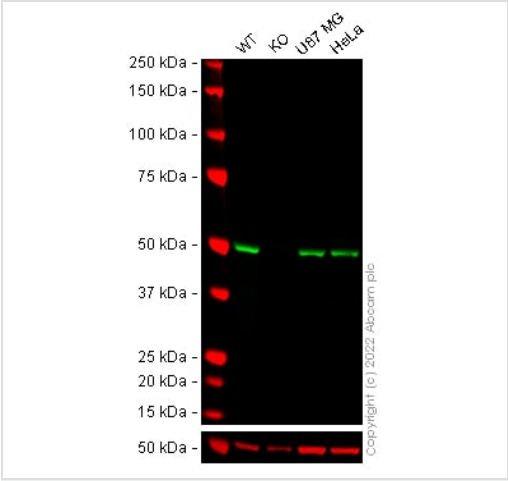
ターゲット情報

機能

Involved in autophagic vesicle formation. Conjugation with ATG12, through a ubiquitin-like conjugating system involving ATG7 as an E1-like activating enzyme and ATG10 as an E2-like conjugating enzyme, is essential for its function. The ATG12-ATG5 conjugate acts as an E3-like enzyme which is required for lipidation of ATG8 family proteins and their association to the vesicle membranes. Involved in mitochondrial quality control after oxidative damage, and in subsequent cellular longevity. The ATG12-ATG5 conjugate also negatively regulates the innate antiviral immune response by blocking the type I IFN production pathway through direct association with RARRES3 and MAVS. Also plays a role in translation or delivery of incoming viral RNA to the translation apparatus. Plays a critical role in multiple aspects of lymphocyte development and is essential for both B and T lymphocyte survival and proliferation. Required for optimal processing and presentation of antigens for MHC II. Involved in the maintenance of axon morphology and membrane structures, as well as in normal adipocyte differentiation. Promotes primary ciliogenesis through removal of OFD1 from centriolar satellites and degradation of IFT20 via the

	autophagic pathway. May play an important role in the apoptotic process, possibly within the modified cytoskeleton. Its expression is a relatively late event in the apoptotic process, occurring downstream of caspase activity. Plays a crucial role in IFN-gamma-induced autophagic cell death by interacting with FADD.
組織特異性	Ubiquitous. The mRNA is present at similar levels in viable and apoptotic cells, whereas the protein is dramatically highly expressed in apoptotic cells.
配列類似性	Belongs to the ATG5 family.
翻訳後修飾	Conjugated to ATG12; which is essential for autophagy, but is not required for association with isolation membrane. Acetylated by EP300.
細胞内局在	Cytoplasm. Preautophagosomal structure membrane. Colocalizes with nonmuscle actin. The conjugate detaches from the membrane immediately before or after autophagosome formation is completed (By similarity). Localizes also to discrete punctae along the ciliary axoneme and to the base of the ciliary axoneme.

画像



Western blot - Anti-APG5L/ATG5 antibody [EPR1755(2)] - BSA and Azide free (ab221604)

All lanes : Anti-APG5L/ATG5 antibody [EPR1755(2)] (**ab108327**) at 1/1000 dilution

Lane 1 : Wild-type THP-1 cell lysate
Lane 2 : ATG5 knockout THP-1 cell lysate
Lane 3 : U-87 MG cell lysate
Lane 4 : HeLa cell lysate

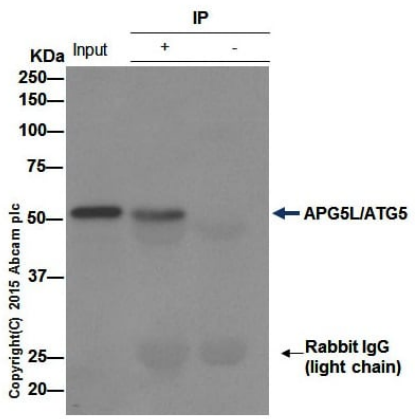
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 32 kDa
Observed band size: 50 kDa

False colour image of Western blot: Anti-APG5L/ATG5 antibody [EPR1755(2)] 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, **ab108327** was shown to bind specifically to APG5L/ATG5. A band was observed at 50 kDa in wild-type THP-1 cell lysates with no signal observed at this size in ATG5 knockout cell line **ab277835** (knockout cell lysate **ab290722**). To generate this image, wild-type and ATG5 knockout THP-1 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane.

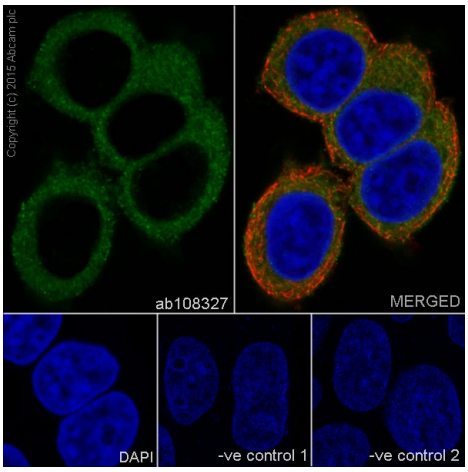
Membranes were blocked in 5 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



Immunoprecipitation - Anti-APG5L/ATG5 antibody [EPR1755(2)] - BSA and Azide free (ab221604)

ab180327 (purified) at 1/20 immunoprecipitating CRSP8 in 10 µg PC-12 whole cell lysate (Lanes 1 and 2, observed at 55 kDa). Lane 3 - PBS. For western blotting, VeriBlot for IP (HRP) (**ab131366**) was used for detection at 1/1000 dilution. Blocking buffer and concentration: 5% NFDM/TBST Dilution buffer and concentration: 5% NFDM/TBST

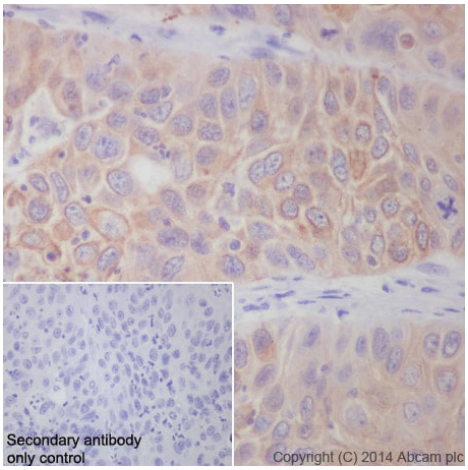
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108327**).



Immunocytochemistry/ Immunofluorescence - Anti-APG5L/ATG5 antibody [EPR1755(2)] - BSA and Azide free (ab221604)

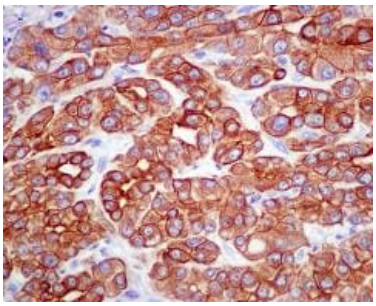
Immunofluorescence staining of MCF7 cells with purified **ab108327** at a working dilution of 1/150, counter-stained with DAPI. The secondary antibody was Alexa Fluor® 488 goat anti-rabbit (**ab150077**), used at a dilution of 1/1000. **ab7291**, a mouse anti-tubulin antibody (1/1000), was used to stain tubulin along with **ab150120** (Alexa Fluor® 594 goat anti-mouse, 1/1000), shown in the top right hand panel. The cells were fixed in 100% methanol and permeabilized using 0.1% Triton X 100. The negative controls are shown in bottom middle and right hand panels - for negative control 1, purified **ab108327** was used at a dilution of 1/500 followed by an Alexa Fluor® 594 goat anti-mouse antibody (**ab150120**) at a dilution of 1/500. For negative control 2, **ab7291** (mouse anti-tubulin) was used at a dilution of 1/500 followed by an Alexa Fluor® 488 goat anti-rabbit antibody (**ab150077**) at a dilution of 1/400.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108327**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-APG5L/ATG5 antibody [EPR1755(2)] - BSA and Azide free (ab221604)

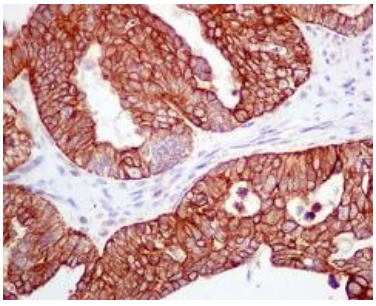
Immunohistochemical staining of paraffin embedded human cervical carcinoma with purified **ab180327** at a working dilution of 1/150. The secondary antibody used is HRP goat anti-rabbit IgG H&L (**ab97051**) at 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was perfomed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108327**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-APG5L/ATG5 antibody [EPR1755(2)] - BSA and Azide free (ab221604)

Unpurified **ab108327**, at 1/100 dilution, staining APG5L/ATG5 in paraffin-embedded Human hepatocellular carcinoma tissue by Immunohistochemistry.

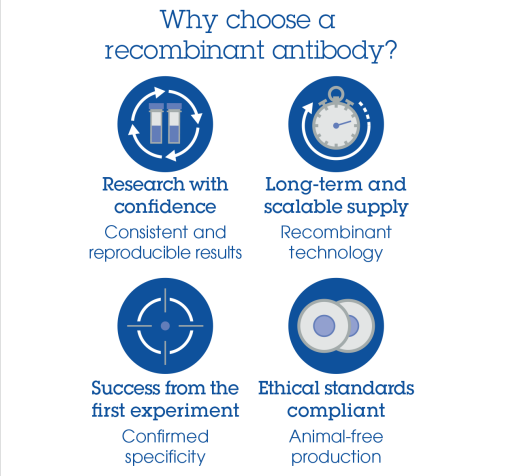
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108327**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-APG5L/ATG5 antibody [EPR1755(2)] - BSA and Azide free (ab221604)

Unpurified **ab108327**, at 1/100 dilution, staining APG5L/ATG5 in paraffin-embedded Human ovarian adenocarcinoma tissue by Immunohistochemistry.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab108327**).



Anti-APG5L/ATG5 antibody [EPR1755(2)] - BSA and Azide free (ab221604)

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