


Anti-ATG12 antibody [EPR4800] ab109491

KO 評価済 リコンビナント RabMAb

8 References 画像数 6

製品の概要

製品名	Anti-ATG12 antibody [EPR4800]
製品の詳細	Rabbit monoclonal [EPR4800] to ATG12
由来種	Rabbit
アプリケーション	適用あり: WB, IHC-P 適用なし: Flow Cyt, ICC/IF or IP
種交差性	交差種: Human 交差が予測される動物種: 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	Human fetal kidney, HepG2, and Raji lysates; ATG12 transfected 293T lysates; Human breast carcinoma tissue.
特記事項	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <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 <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
バッファー	pH: 7.20 Preservative: 0.05% Sodium azide 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EPR4800
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ab109491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。

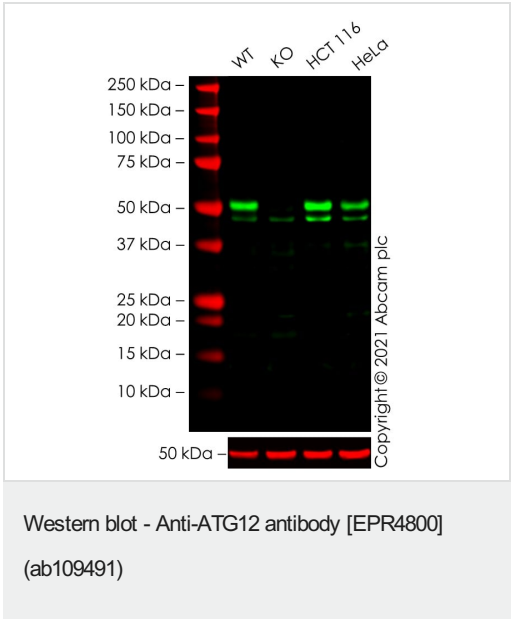
アプリケーション	Abreviews	特記事項
WB		1/1000 - 1/10000. Predicted molecular weight: 15 kDa.
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

追加情報Is unsuitable for Flow Cyt, ICC/IF or IP.

ターゲット情報

機能Ubiquitin-like protein required for autophagy. Conjugated to ATG3 and ATG5.
組織特異性Ubiquitous.
配列類似性Belongs to the ATG12 family.
ドメインShares weak sequence similarity with ubiquitin family, but contains an 'ubiquitin superfold' and the C-terminal Gly is required for isopeptide linkage.
細胞内局在Cytoplasm.

画像



All lanes : Anti-ATG12 antibody [EPR4800] (ab109491) at 1/1000 dilution

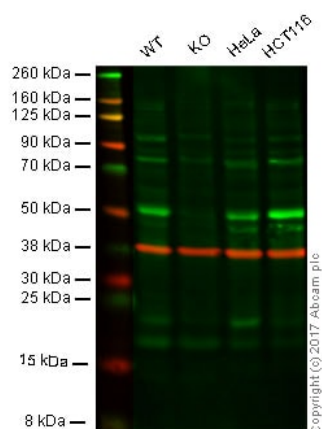
- Lane 1 : Wild-type THP-1 cell lysate
- Lane 2 : ATG12 knockout THP-1 cell lysate
- Lane 3 : HCT 116 cell lysate
- Lane 4 : HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 15 kDa
Observed band size: 52 kDa

False colour image of Western blot: Anti-ATG12 antibody [EPR4800] 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, ab109491 was shown to bind specifically to ATG12. A band likely to be the unfunctional complex with ATG5 was observed at 52 kDa in wild-type THP-1 cell lysates with no signal observed at this size in Atg12 knockout cell line [ab277831](#) (knockout cell lysate [ab278183](#)) - unconjugated functional form not observed at 15 kDa. To generate this image, wild-type and Atg12 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 3% 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 (IRDye[®] 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye[®] 680RD) preabsorbed ([ab216776](#)) at 1/20000 dilution.



Western blot - Anti-ATG12 antibody [EPR4800] (ab109491)

Lane 1: Wild type HAP1 whole cell lysate (20 µg)

Lane 2: ATG12 knockout HAP1 whole cell lysate (20 µg)

Lane 3: HeLa whole cell lysate (20 µg)

Lane 4: HCT116 whole cell lysate (20 µg)

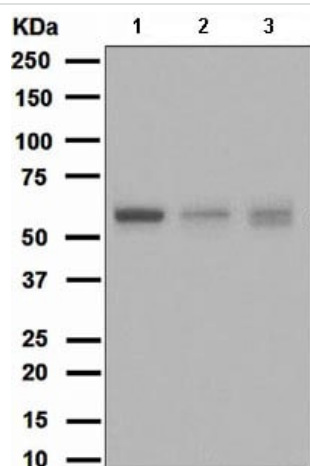
Lanes 1 - 4: Merged signal (red and green). Green - ab109491 observed at 55 kDa. Observed band shows ATG12-ATG5 conjugation. Red - loading control, [ab8245](#), observed at 37 kDa.

Ab109491 was shown to specifically react with

ATG12 in wild-type cells along with additional cross-reactive bands.

The band was not seen in ATG12 knockout HAP1 cells. Wild-type and ATG12 knockout samples were subjected to SDS-PAGE.

Ab109491 and [ab8245](#) (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/10000 dilution respectively. Blots were developed 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 1/10000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-ATG12 antibody [EPR4800]
(ab109491)

All lanes : Anti-ATG12 antibody [EPR4800] (ab109491) at 1/1000 dilution

Lane 1 : Human fetal kidney tissue lysate

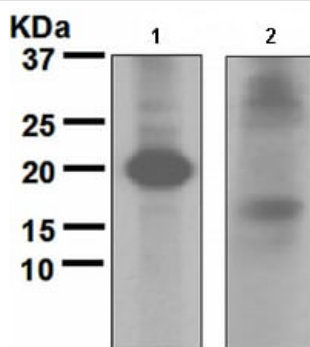
Lane 2 : HepG2 cell lysate

Lane 3 : Raji lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 15 kDa

Observed band shows ATG12-ATG5 conjugation



Western blot - Anti-ATG12 antibody [EPR4800]
(ab109491)

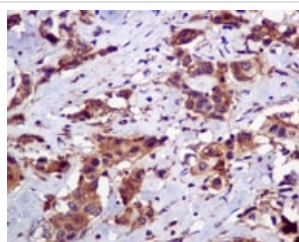
All lanes : Anti-ATG12 antibody [EPR4800] (ab109491) at 1/1000 dilution

Lane 1 : ATG12 transfected 293T lysate

Lane 2 : Non-transfected 293T lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 15 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ATG12 antibody [EPR4800] (ab109491)

ab109491, at 1/250 dilution, staining ATG12 in paraffin-embedded Human breast carcinoma by Immunohistochemistry.

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

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-ATG12 antibody [EPR4800] (ab109491)

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