

### HRP Anti-ATG7 antibody [EPR6251] ab215336

KO 評価済

リコンビナント

RabMAb

画像数 3

#### 製品の概要

製品名	HRP Anti-ATG7 antibody [EPR6251]
製品の詳細	HRP Rabbit monoclonal [EPR6251] to ATG7
由来種	Rabbit
標識	HRP
アプリケーション	適用あり: WB
種交差性	交差種: 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	HepG2, Hek293, Jurkat, HAP1 WT (shows pos.), Apg7 KO HAP1 (shows neg.)
特記事項	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <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> <p>For more information <a href="#">see here</a>.</p> <p>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>.</p>

#### 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. Avoid freeze / thaw cycle. Store In the Dark.
バッファー	pH: 7.40 Preservative: 0.1% Proclin 300 Solution Constituents: 1% BSA, 30% Glycerol (glycerin, glycerine), PBS
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR6251
アイソタイプ	IgG

## アプリケーション

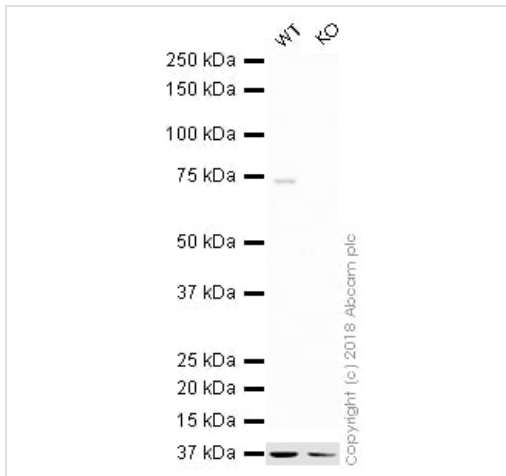
**The Abpromise guarantee**      **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab215336の使用に適用されず  
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		1/5000. Detects a band of approximately 77 kDa (predicted molecular weight: 77 kDa).

## ターゲット情報

<b>機能</b>	E1-like activating enzyme involved in the 2 ubiquitin-like systems required for cytoplasm to vacuole transport (Cvt) and autophagy. Activates ATG12 for its conjugation with ATG5 as well as the ATG8 family proteins for their conjugation with phosphatidylethanolamine. Both systems are needed for the ATG8 association to Cvt vesicles and autophagosomes membranes. Required for autophagic death induced by caspase-8 inhibition. Required for mitophagy which contributes to regulate mitochondrial quantity and quality by eliminating the mitochondria to a basal level to fulfill cellular energy requirements and preventing excess ROS production. Modulates p53/TP53 activity to regulate cell cycle and survival during metabolic stress. Plays also a key role in the maintenance of axonal homeostasis, the prevention of axonal degeneration, the maintenance of hematopoietic stem cells, the formation of Paneth cell granules, as well as in adipose differentiation.
<b>組織特異性</b>	Widely expressed, especially in kidney, liver, lymph nodes and bone marrow.
<b>配列類似性</b>	Belongs to the ATG7 family.
<b>ドメイン</b>	The C-terminal part of the protein is essential for the dimerization and interaction with ATG3 and ATG12. The N-terminal FAP motif (residues 15 to 17) is essential for the formation of the ATG89-PE and ATG5-ATG12 conjugates.
<b>翻訳後修飾</b>	Acetylated by EP300.
<b>細胞内局在</b>	Cytoplasm. Preautophagosomal structure. Localizes also to discrete punctae along the ciliary axoneme and to the base of the ciliary axoneme.

## 画像



Western blot - HRP Anti-ATG7 antibody [EPR6251]  
(ab215336)

**All lanes :** HRP Anti-ATG7 antibody [EPR6251] (ab215336) at 1/5000 dilution

**Lane 1 :** Wild-type HAP1 whole cell lysate

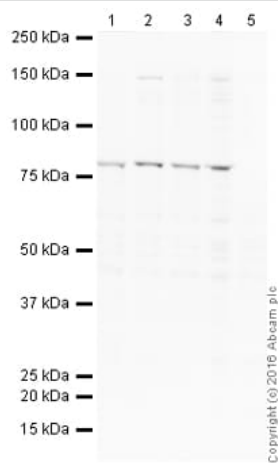
**Lane 2 :** ATG7 knockout HAP1 whole cell lysate

Lysates/proteins at 20 µg per lane.

**Predicted band size:** 77 kDa

**Exposure time:** 20 minutes

ab215336 was shown to specifically react with Apg7 in wild-type HAP1 cells as signal was lost in ATG7 knockout cells. Wild-type and ATG7 knockout samples were subjected to SDS-PAGE. Ab215336 and **ab184095** (Mouse monoclonal [mAbcam 9484] to GAPDH - Loading Control (Alexa Fluor® 680) loading control) were incubated overnight at 4°C at 1/5000 dilution and 1/20000 dilution respectively. The loading control was imaged using the Licor Odyssey CLx prior to blots being developed with ECL technique.



Western blot - HRP Anti-ATG7 antibody [EPR6251] (ab215336)

**All lanes** : HRP Anti-ATG7 antibody [EPR6251] (ab215336) at 1/5000 dilution

**Lane 1** : HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate at 10 µg

**Lane 2** : HEK293 (Human embryonic kidney cell line) Whole Cell Lysate at 10 µg

**Lane 3** : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate at 10 µg

**Lane 4** : HAP1 WT at 20 µg

**Lane 5** : Apg7 KO HAP1 at 20 µg

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 77 kDa

**Observed band size:** 77 kDa

**Exposure time:** 20 minutes

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab215336 overnight at 4°C. Antibody binding was visualised using ECL development solution [ab133406](#).

### 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

HRP Anti-ATG7 antibody [EPR6251] (ab215336)

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

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