# abcam

## Product datasheet

# Alexa Fluor® 488 Anti-ATG7 antibody [EPR6251] ab214867

重组 RabMAb

2 图像 1 References

#### 概述

产品名称 Alexa Fluor® 488荧光Anti-ATG7抗体[EPR6251]

描述 Alexa Fluor® 488荧光兔单克隆抗体[EPR6251] to ATG7

宿主 Rabbit

偶联物 Alexa Fluor® 488. Ex: 495nm, Em: 519nm

经测试应用 适用于: ICC/IF 种属反应性 与反应: Human

预测可用于: Mouse, Rat 🕰

免疫原 Synthetic peptide within Human ATG7 aa 1-100. The exact immunogen sequence used to

> generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please contact our Scientific Support

team to discuss your requirements.

Database link: **O95352** 

Run BLAST with Run BLAST with

阳性对照 ICC/IF: Jurkat cells

常规说明 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**.

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性能

形式 Liquid

**存放说明** 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.

**存储溶液** pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS

纯**度** Protein A purified

**克隆** 单克隆 **克隆编号** EPR6251

**同种型** IgG

#### 应用

#### The Abpromise guarantee

Abpromise™承诺保证使用ab214867于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF		1/100. This product gave a positive signal in Jurkat cells fixed with 80% methanol (5 min)

#### 靶标

#### 功能

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.

组织特异性 Widely expressed, especially in kidney, liver, lymph nodes and bone marrow.

**序列相似性** Belongs to the ATG7 family.

结构域 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.

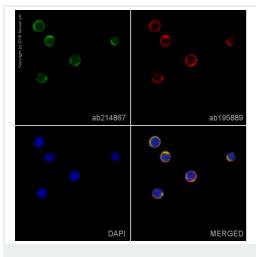
翻译后修饰

细胞定位

Acetylated by EP300.

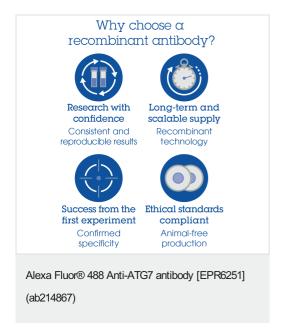
Cytoplasm. Preautophagosomal structure. Localizes also to discrete punctae along the ciliary axoneme and to the base of the ciliary axoneme.

#### 图片



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-ATG7 antibody [EPR6251] (ab214867) ab214867 staining ATG7 in Jurkat cells. The cells were fixed with 80% methanol (5 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab214867 at 1/100 dilution (shown in green) and <a href="mailto:ab195889">ab195889</a>, Mouse monoclonal to alpha Tubulin (Alexa Fluor<sup>®</sup> 594), at 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



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