abcam

Product datasheet

Alexa Fluor® 647 Anti-APG5L/ATG5 antibody [EPR4797] ab206715



1 References 2 Images

Overview

Product name Alexa Fluor® 647 Anti-APG5L/ATG5 antibody [EPR4797]

Description Alexa Fluor® 647 Rabbit monoclonal [EPR4797] to APG5L/ATG5

Host species Rabbit

Alexa Fluor® 647. Ex: 652nm, Em: 668nm Conjugation

Tested applications Suitable for: ICC/IF Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat

Synthetic peptide within Human APG5L/ATG5 aa 1-100 (N terminal). The exact immunogen **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: Q9H1Y0

Run BLAST with Run BLAST with

Positive control ICC/IF: HeLa cells

General notes 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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Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Stable for 12 months at -20°C. Store In the Dark.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

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

Purity Protein A purified

ClonalityMonoclonalClone numberEPR4797

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab206715 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		1/100. This product gave a positive signal in HeLa cells fixed with 100% methanol (5 min)

Target

Function

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.

Tissue specificity

Ubiquitous. The mRNA is present at similar levels in viable and apoptotic cells, whereas the protein is dramatically highly expressed in apoptotic cells.

Sequence similarities

Belongs to the ATG5 family.

Post-translational modifications

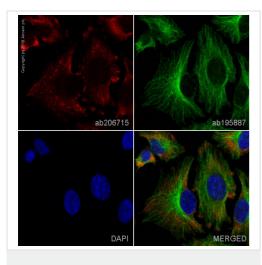
Conjugated to ATG12; which is essential for autophagy, but is not required for association with isolation membrane.

Acetylated by EP300.

Cellular localization

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.

Images



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-APG5L/ATG5 antibody [EPR4797] (ab206715) ab206715 staining APG5L/ATG5 in HeLa cells. The cells were fixed with 100% methanol (5min), 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 ab206715 at 1/100 dilution (shown in red) and ab195887, Mouse monoclonal to alpha Tubulin (Alexa Fluor[®] 488), at 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue).

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



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