abcam

Product datasheet

Anti-APG5L/ATG5 antibody ab19130

★★★★★ 7 Abreviews 3 References 2 Images

Overview

Product name Anti-APG5L/ATG5 antibody

Description Chicken polyclonal to APG5L/ATG5

Host species Chicken

Tested applications Suitable for: WB, IP

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen Recombinant fragment, corresponding to amino acids 1-275 of Human APG5L.

Positive control E coli-derived recombinant protein. (In tissue, the protein is ubiquitous. The mRNA is present at

similar levels in viable and apoptotic cells whereas the protein is dramatically highly expressed in

apoptotic cells).

Properties

Form Liquid

Storage instructions Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer Constituent: PBS

Purity Protein L purified

Clonality Polyclonal

Isotype IgY

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab19130 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
WB	★★★★★ (4)	
IP	★★★★★ (3)	

Application notes IP: Use at a dilution of 1/200 (for 20 hrs on total 250 ug protein).

WB: 1/500. Predicted molecular weight: 32 kDa.

Not tested in other applications.

Optimal dilutions/concentrations should be determined by the end user.

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

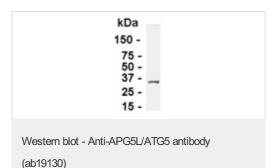
Conjugated to ATG12; which is essential for autophagy, but is not required for association with isolation membrane.

Acetylated by EP300.

Cellular localization

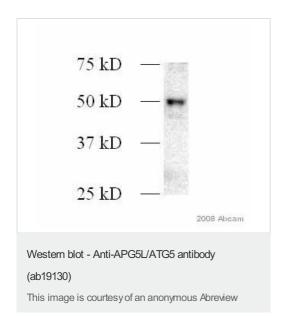
Cytoplasm. Preautophagosomal structure membrane. Colocalizes with nonmuscle actin. The conjugate detaches from the membrane immediately before or after autophagosome formation is completed (By similarity). Localizes also to discrete punctae along the ciliary axoneme and to the base of the ciliary axoneme.

Images



ab19130 at1/1000 staining *E.coli*-derived recombinant protein by western blot. Detected using a goat anti-lgY-HRP. Colorimetric method used for signal development.

ab19130 at1/1000 staining E.coli-derived recombinant protein by western blot. Detected using a goat anti-lgY-HRP. Colorimetric method used for signal development.



Anti-APG5L/ATG5 antibody (ab19130) at 1/2000 dilution + Rat C6 cells, whole cell lysate at 25 μg

Secondary

Rabbit Anti-Chicken IgY H&L (HRP) (ab6753) at 1/2000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

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

Exposure time: 5 seconds

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- · Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors