abcam

Product datasheet

Anti-ATG4C antibody [EPR15001] ab183516

KO VALIDATED Recombinant RabMAb

<u>1 References</u> 5 Images

Overview

Product name	Anti-ATG4C antibody [EPR15001]	
Description	Rabbit monoclonal [EPR15001] to ATG4C	
Host species	Rabbit	
Tested applications	Suitable for: WB, IHC-P, Flow Cyt (Intra)	
Species reactivity	Reacts with: Human	
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.	
Positive control	WB: 293 cells and cell lysates; Jurkat and Raji cell lysates. IHC-P: Human skeletal muscle tissue.	
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 $^{ extsf{B}}$ technology is a patented hybridoma-based technology for making rabbit	
	monoclonal antibodies. For details on our patents, please refer to <u>RabMAb[®] patents</u> .	

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. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR15001
lsotype	lgG

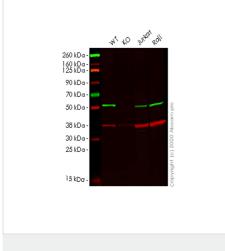
The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab183516 in the following tested applications.

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

Application	Abreviews	Notes
WB		1/1000. Detects a band of approximately 52 kDa (predicted molecular weight: 52 kDa).
IHC-P		1/250. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Flow Cyt (Intra)		1/100. <u>ab172730</u> - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.

Target		
Function	Cysteine protease required for autophagy, which cleaves the C-terminal part of either MAP1LC3, GABARAPL2 or GABARAP, allowing the liberation of form I. A subpopulation of form I is subsequently converted to a smaller form (form II). Form II, with a revealed C-terminal glycine, is considered to be the phosphatidylethanolamine (PE)-conjugated form, and has the capacity for the binding to autophagosomes.	
Tissue specificity	Highly expressed in skeletal muscle, heart, liver and testis.	
Sequence similarities	Belongs to the peptidase C54 family.	
Cellular localization	Cytoplasm.	

Images



Western blot - Anti-ATG4C antibody [EPR15001] (ab183516) All lanes : Anti-ATG4C antibody [EPR15001] (ab183516) at 1/1000 dilution

- Lane 1 : Wild-type HEK293T cell lysate
- Lane 2 : ATG4C knockout HEK293T cell lysate
- Lane 3 : Jurkat cell lysate
- Lane 4 : Raji cell lysate

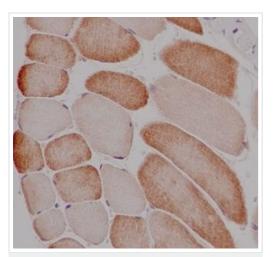
Lysates/proteins at 20 µg per lane.

Secondary

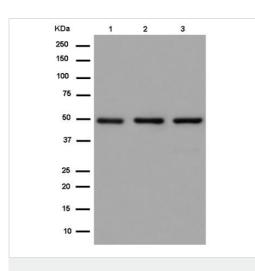
All lanes : Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (<u>ab216773</u>) at 1/10000 dilution

Predicted band size: 52 kDa Observed band size: 52 kDa Lanes 1-4: Merged signal (red and green). Green - ab183516 observed at 52 kDa. Red - loading control <u>ab8245</u> observed at 36 kDa.

ab183516 Anti-ATG4C antibody [EPR15001] was shown to specifically react with ATG4C in wild-type HEK293T cells. Loss of signal was observed when knockout cell line <u>ab267324</u> (knockout cell lysate <u>ab257847</u>) was used. Wild-type and ATG4C knockout samples were subjected to SDS-PAGE. ab183516 and Anti-GAPDH antibody [6C5] - Loading Control (<u>ab8245</u>) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye[®] 800CW) preadsorbed (<u>ab216773</u>) and Goat anti-Mouse lgG H&L (IRDye[®] 680RD) preadsorbed (<u>ab216776</u>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ATG4C antibody [EPR15001] (ab183516) Immunohistochemical analysis of paraffin-embedded Human skeletal muscle tissue labeling ATG4C with ab183516 at 1/250 dilution. The slide is counterstained with Hematoxylin. Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



Western blot - Anti-ATG4C antibody [EPR15001] (ab183516) All lanes : Anti-ATG4C antibody [EPR15001] (ab183516) at 1/20000 dilution

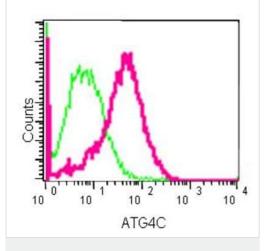
Lane 1 : Jurkat cell lysate Lane 2 : Raji cell lysate Lane 3 : 293 cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 52 kDa



Flow Cytometry (Intracellular) - Anti-ATG4C antibody [EPR15001] (ab183516) Intracellular flow cytometric analysis of 2%paraformaldehyde-fixed 293 cells labeling ATG4Cwith ab183516 at 1/100 dilution (green). Goat anti-rabbit IgG (FITC) at 1/150 dilution was used as the secondary antibody. Rabbit monoclonal IgG was used as the isotype control (red).



Anti-ATG4C antibody [EPR15001] (ab183516)

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