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antibody and ELISA experts

BOSTER BIOLOGICAL TECHNOLOGY
3942 B Valley Ave, Pleasanton, CA 94566
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Anti-ATG4A Antibody

Catalog Number: M06539-1

About ATG4A

Cysteine protease required for the cytoplasm to vacuole transport (Cvt) and autophagy. Cleaves the C-terminal amino acid of ATG8 family proteins to reveal a C-terminal glycine. Exposure of the glycine at the C-terminus is essential for ATG8 proteins conjugation to phosphatidylethanolamine (PE) and insertion to membranes, which is necessary for autophagy. Preferred substrate is GABARAPL2 followed by MAP1LC3A and GABARAP. Has also an activity of delipidating enzyme for the PE-conjugated forms.

Overview

Product Name	Anti-ATG4A Antibody
Reactive Species	Human
Description	Boster Bio Anti-ATG4A Antibody (Catalog # M06539-1). Tested in WB, Flow Cytometry, IHC-P, IF application(s). This antibody reacts with Human.
Application	Flow Cytometry, IF, IHC-P, WB
Clonality	Monoclonal 1458CT808.66.25.69
Formulation	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.
Storage Instructions	Maintain refrigerated at 2-8°C for up to 2 weeks. For long-term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.
Host	Mouse
Uniprot ID	Q8WYN0

Technical Details

Immunogen	This ATG4A antibody is generated from a mouse immunized with a recombinant protein.
Predicted Reactive Species	Mouse
Isotype	IgG2b,k
Purification	This antibody is purified through a protein G column, followed by dialysis against PBS.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: IF: 1:25 WB: 1:500

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	IHC-P: 1:25 FC: 1:25

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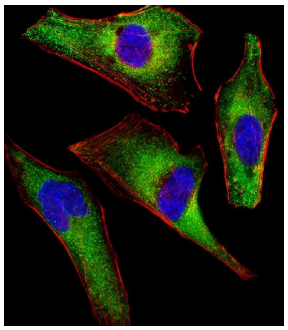
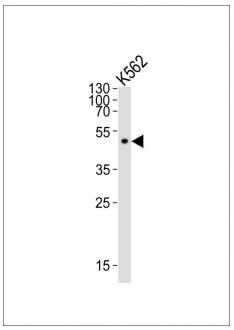
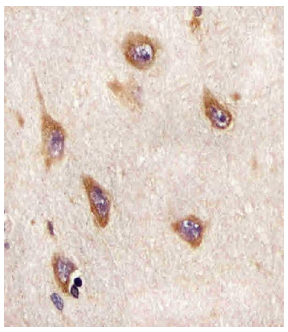
Anti-ATG4A Antibody (M06539-1) Images



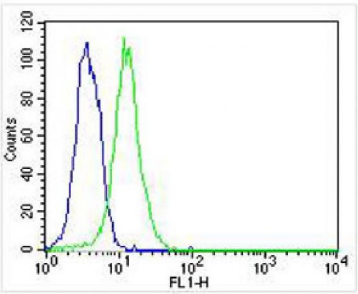
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (human cervical epithelial adenocarcinoma cell line) cells labeling ATG4A with M06539-1 at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-mouse IgG secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm staining on HeLa cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin at 1/100 dilution (red).The nuclear counter stain is DAPI (blue).



Western blot analysis of lysate from K562 cell line, using ATG4A Antibody. M06539-1 was diluted at 1:500. A goat anti-mouse IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.



M06539-1 staining ATG4A in human brain sections by Immunohistochemistry (IHC-P -paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



Overlay histogram showing Hela cells stained with M06539-1 (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (M06539-1, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Mouse IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed at 1/400 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was mouse IgG2b (1g/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

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