

DATASHEET
ATG4D Mouse Monoclonal Antibody(C3938)
CAT. NO. AMA03550
KEY FEATURES

Target	ATG4D	Source / Host	Mouse
Reactivity	Human	Clonality	Monoclonal
Applications	WB, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Mouse IgG1 kappa. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.	Storage	at-20°C

BACKGROUND

Cysteine protease that plays a key role in autophagy by mediating both proteolytic activation and delipidation of ATG8 family proteins. The protease activity is required for proteolytic activation of ATG8 family proteins: cleaves the C-terminal amino acid of ATG8 proteins MAP1LC3 and GABARAPL2, 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. In addition to the protease activity, also mediates delipidation of ATG8 family proteins. Catalyzes delipidation of PE-conjugated forms of ATG8 proteins during macroautophagy.

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:1000 - 1:2000
IF/ICC	1:10 - 1:50

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Mouse monoclonal antibody to ATG4D
Specificity	Recognizes endogenous levels of ATG4D protein.
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human ATG4D. The exact sequence is proprietary.
Purification	This antibody is purified through a protein G column.
Molecular Weight	Predicted: 52 kD; Observed: 53 kD
Form/Buffer	Mouse IgG1 kappa. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	APG4D; AUTL4; Cysteine protease ATG4D; AUT-like 4 cysteine endopeptidase; Autophagin-4; Autophagy-related cysteine endopeptidase 4; Autophagy-related protein 4 homolog D
Gene Symbol	ATG4D
Entrez Gene	84971(Human)
SwissProt	Q86TL0(Human)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

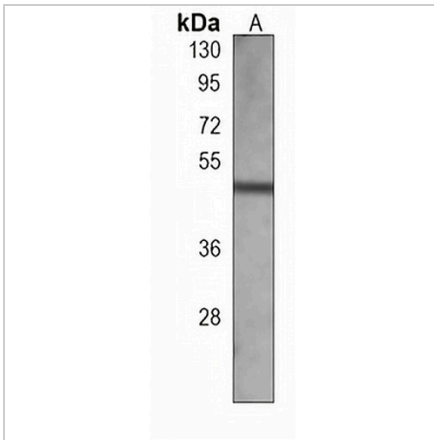
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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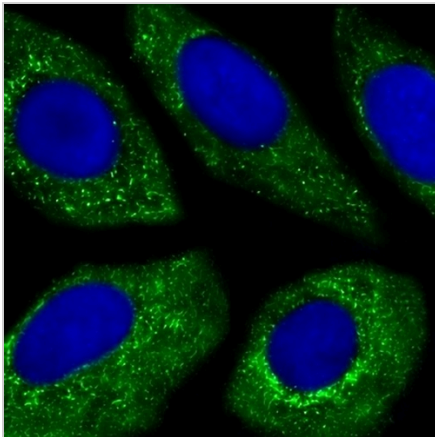
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DATA



Western blot analysis of ATG4D expression in A431 (A) whole cell lysates. (Predicted band size: 52 kD; Observed band size: 53 kD)



Immunofluorescent analysis of ATG4D staining in U251 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.