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Anti-Atg4C Rabbit Monoclonal Antibody

Catalog # ABO13811

Product Information

Application	WB, IHC, FC
Primary Accession	Q96DT6
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid
Description	Anti-Atg4C Rabbit Monoclonal Antibody . Tested in WB, IHC, Flow Cytometry applications. This antibody reacts with Human.

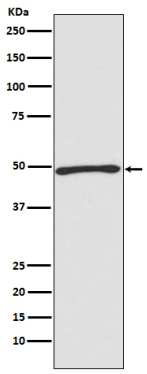
Additional Information

Gene ID	84938
Other Names	Cysteine protease ATG4C, 3.4.22.-, AUT-like 3 cysteine endopeptidase, Autophagy-related cysteine endopeptidase 3, Autophagin-3, Autophagy-related protein 4 homolog C, HsAPG4C, ATG4C {ECO:0000303|PubMed:21177865, ECO:0000312|HGNC:HGNC:16040}
Calculated MW	52497
Application Details	WB 1:1000-1:5000 IHC 1:50-1:200 FC 1:50
Subcellular Localization	Cytoplasm.
Tissue Specificity	Highly expressed in skeletal muscle, heart, liver and testis..
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: ABIC-1
Immunogen	A synthesized peptide derived from human Atg4C
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	ATG4C {ECO:0000303|PubMed:21177865, ECO:0000312|HGNC:HGNC:16040}
Function	Cysteine protease that plays a key role in autophagy by mediating both proteolytic activation and delipidation of ATG8 family proteins (PubMed:21177865, PubMed:29458288, PubMed:30661429). 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 (PubMed:21177865). 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 (By similarity). In addition to the protease activity, also mediates delipidation of ATG8 family proteins (PubMed:29458288, PubMed:33909989). Catalyzes delipidation of PE-conjugated forms of ATG8 proteins during macroautophagy (PubMed:29458288, PubMed:33909989). Compared to ATG4B, the major protein for proteolytic activation of ATG8 proteins, shows weaker ability to cleave the C-terminal amino acid of ATG8 proteins, while it displays stronger delipidation activity (PubMed:29458288). In contrast to other members of the family, weakly or not involved in phagophore growth during mitophagy (PubMed:33773106).
Cellular Location	Cytoplasm {ECO:0000250|UniProtKB:Q8BGE6}.

Images



Western blot analysis of Atg4C expression in Jurkat cell lysate.

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