

Recombinant Anti-ATG4C Rabbit mAb

Catalog # AP95060

Product Information

Application	WB, IHC, FC
Primary Accession	Q96DT6
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal
Calculated MW	52497

Additional Information

Gene ID	84938
Other Names	APG4C; AUTL1; AUTL3; Cysteine protease ATG4C; AUT-like 3 cysteine endopeptidase; Autophagin-3; Autophagy-related cysteine endopeptidase 3; Autophagy-related protein 4 homolog C
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within human ATG4C protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~1:10~50
Format	Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

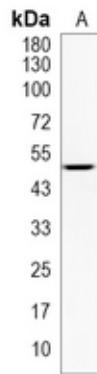
Name	ATG4C {ECO:0000303 PubMed:21177865, ECO:0000312 HGNC:HGNC:16040}
Function	Cysteine protease that plays a key role in autophagy by mediating both proteolytic activation and delipidation of ATG8 family proteins (PubMed: 21177865 , PubMed: 29458288 , PubMed: 30661429). The protease activity is required 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 (A) whole cell lysates. (Predicted band size: 52 kD; Observed band size: 52 kD)

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