10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KD-Validated Anti-Atg4C Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1427

Product Information

Application	WB, FC, ICC
Primary Accession	Q96DT6
Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	23GB670
Calculated MW	52497
Gene Name	ATG4C
Aliases	ATG4C; Autophagy Related 4C Cysteine Peptidase; AUTL3; APG4C; AUTL1; Autophagy-Related Cysteine Endopeptidase 3; Autophagy-Related Protein 4 Homolog C; AUT-Like 3 Cysteine Endopeptidase; Cysteine Protease ATG4C; Autophagin-3; FLJ14867; HsAPG4C; AUT (S. Cerevisiae)-Like 1, Cysteine Endopeptidase; AUT-Like 1, Cysteine Endopeptidase (S. Cerevisiae); ATG4 Autophagy Related 4 Homolog C (S. Cerevisiae); APG4 Autophagy 4 Homolog C (S. Cerevisiae); Epididymis Secretory Sperm Binding Protein; Autophagy Related 4C, Cysteine Peptidase; ATG4 Autophagy Related 4 Homolog C; AUT-Like 1, Cysteine; Endopeptidase; APG4 Autophagy 4 Homolog C; EC 3.4.22.-; EC 3.4.22; APG4-C
Immunogen	A synthesized peptide derived from human ATG4C

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}

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}.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.