

ATG4C Rabbit mAb

Catalog # AP75121

Product Information

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

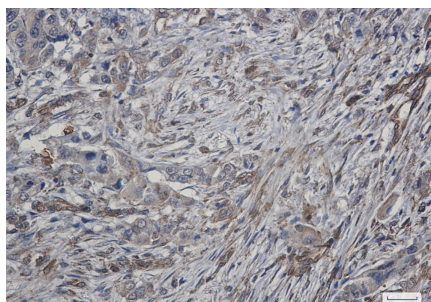
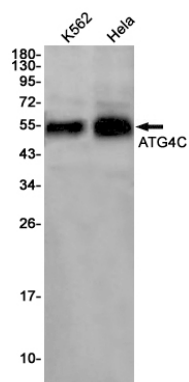
Additional Information

Gene ID	84938
Other Names	ATG4C
Dilution	WB~~1/500-1/1000 IHC-P~~N/A
Format	Liquid

Protein Information

Name	ATG4C {ECO:0000303 PubMed:21177865, ECO:0000312 HGNC:HGNC:16040}
Function	<p>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).</p>
Cellular Location	Cytoplasm {ECO:0000250 UniProtKB:Q8BGE6}.

Images



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