

# Anti-Atg4C Rabbit Monoclonal Antibody

Catalog # ABO13811

## Product Information

---

|                          |                                                                                                                          |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | WB, IHC, FC                                                                                                              |
| <b>Primary Accession</b> | <a href="#">Q96DT6</a>                                                                                                   |
| <b>Host</b>              | Rabbit                                                                                                                   |
| <b>Isotype</b>           | Rabbit IgG                                                                                                               |
| <b>Reactivity</b>        | Human                                                                                                                    |
| <b>Clonality</b>         | Monoclonal                                                                                                               |
| <b>Format</b>            | Liquid                                                                                                                   |
| <b>Description</b>       | Anti-Atg4C Rabbit Monoclonal Antibody . Tested in WB, IHC, Flow Cytometry applications. This antibody reacts with Human. |

## Additional Information

---

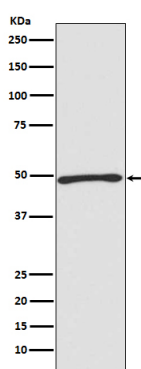
|                                 |                                                                                                                                                                                                                                                  |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene ID</b>                  | 84938                                                                                                                                                                                                                                            |
| <b>Other Names</b>              | 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} |
| <b>Calculated MW</b>            | 52497                                                                                                                                                                                                                                            |
| <b>Application Details</b>      | WB 1:1000-1:5000<br>IHC 1:50-1:200<br>FC 1:50                                                                                                                                                                                                    |
| <b>Subcellular Localization</b> | Cytoplasm.                                                                                                                                                                                                                                       |
| <b>Tissue Specificity</b>       | Highly expressed in skeletal muscle, heart, liver and testis..                                                                                                                                                                                   |
| <b>Source</b>                   | Eukaryota                                                                                                                                                                                                                                        |
| <b>Contents</b>                 | Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.                                                                                                                              |
| <b>Clone Names</b>              | Clone: ABIC-1                                                                                                                                                                                                                                    |
| <b>Immunogen</b>                | A synthesized peptide derived from human Atg4C                                                                                                                                                                                                   |
| <b>Purification</b>             | Affinity-chromatography                                                                                                                                                                                                                          |
| <b>Storage</b>                  | 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

---

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>              | ATG4C {ECO:0000303 PubMed:21177865, ECO:0000312 HGNC:HGNC:16040}                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Function</b>          | Cysteine protease that plays a key role in autophagy by mediating both proteolytic activation and delipidation of ATG8 family proteins (PubMed: <a href="#">21177865</a> , PubMed: <a href="#">29458288</a> , PubMed: <a href="#">30661429</a> ). 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: <a href="#">21177865</a> ). 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: <a href="#">29458288</a> , PubMed: <a href="#">33909989</a> ). Catalyzes delipidation of PE-conjugated forms of ATG8 proteins during macroautophagy (PubMed: <a href="#">29458288</a> , PubMed: <a href="#">33909989</a> ). 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: <a href="#">29458288</a> ). In contrast to other members of the family, weakly or not involved in phagophore growth during mitophagy (PubMed: <a href="#">33773106</a> ). |
| <b>Cellular Location</b> | Cytoplasm {ECO:0000250 UniProtKB:Q8BGE6}.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

## Images



Western blot analysis of Atg4C expression in Jurkat cell lysate.

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