

ATG4B Antibody (F54714)

| Catalog No. | Formulation | Size |
|---------------|--|---------|
| F54714-0.4ML | In 1X PBS, pH 7.4, with 0.09% sodium azide | 0.4 ml |
| F54714-0.08ML | In 1X PBS, pH 7.4, with 0.09% sodium azide | 0.08 ml |

Bulk quote request

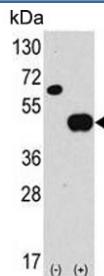
| | |
|---------------------------|---|
| Availability | 1-3 business days |
| Species Reactivity | Human, Mouse |
| Format | Purified |
| Host | Rabbit |
| Clonality | Polyclonal (rabbit origin) |
| Isotype | Rabbit Ig |
| Purity | Purified |
| UniProt | Q9Y4P1 |
| Localization | Cytoplasmic |
| Applications | Immunohistochemistry (FFPE) : 1:25 Western Blot : 1:500-1:2000 |
| Limitations | This ATG4B antibody is available for research use only. |

kDa
250
150
100
75
50
37
25
20
15

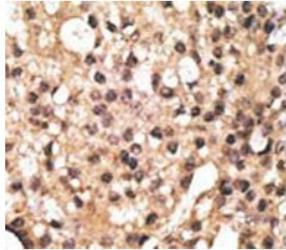
Western blot testing of human CCRF-CEM cell lysate with ATG4B antibody. Expected molecular weight: 37-52 kDa (multiple isoforms).

kDa
95
72
55
36
28

Western blot testing of mouse cerebellum tissue lysate with ATG4B antibody. Expected molecular weight: 37-52 kDa (multiple isoforms).



Western blot testing of 1) non-transfected and 2) transfected 293 cell lysate with ATG4B antibody.



IHC testing of FFPE human breast cancer tissue with ATG4B antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.

Description

Macroautophagy is the major inducible pathway for the general turnover of cytoplasmic constituents in eukaryotic cells, it is also responsible for the degradation of active cytoplasmic enzymes and organelles during nutrient starvation.

Macroautophagy involves the formation of double-membrane bound autophagosomes which enclose the cytoplasmic constituent targeted for degradation in a membrane bound structure, which then fuse with the lysosome (or vacuole) releasing a single-membrane bound autophagic bodies which are then degraded within the lysosome (or vacuole). APG4 is a cysteine protease required for autophagy, which cleaves the C-terminal part of either MAP1LC3, GABARAPL2 or GABARAP, allowing the liberation of form I. A subpopulation of form I is subsequently converted to a smaller form (form II). Form II, with a revealed C-terminal glycine, is considered to be the phosphatidylethanolamine (PE)-conjugated form, and has the capacity for the binding to autophagosomes.

Application Notes

The stated application concentrations are suggested starting points. Titration of the ATG4B antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 16-45 from the human protein was used as the immunogen for the ATG4B antibody.

Storage

Aliquot the ATG4B antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles.