

ARG54904 anti-ATG4A antibody

Package: 100 µl
Store at: -20°C

Summary

| | |
|---------------------|--|
| Product Description | Rabbit Polyclonal antibody recognizes ATG4A |
| Tested Reactivity | Hu, Ms, Rat |
| Tested Application | ICC/IF, WB |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | IgG |
| Target Name | ATG4A |
| Species | Human |
| Immunogen | Recombinant protein of Human ATG4A (NP_443168.2) |
| Conjugation | Un-conjugated |
| Alternate Names | Cysteine protease ATG4A; Autophagin-2; AUT-like 2 cysteine endopeptidase; APG4A; Autophagy-related cysteine endopeptidase 2; EC 3.4.22.-; AUTL2; Autophagy-related protein 4 homolog A; hAPG4A |

Application Instructions

| Application table | Application | Dilution |
|-------------------|--|----------------|
| | ICC/IF | 1:50 - 1:200 |
| | WB | 1:500 - 1:2000 |
| Application Note | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. | |
| Positive Control | BT474 | |

Properties

| | |
|---------------------|---|
| Form | Liquid |
| Purification | Affinity purification with immunogen. |
| Buffer | PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol |
| Preservative | 0.02% Sodium azide |
| Stabilizer | 50% Glycerol |
| Storage instruction | For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use. |
| Note | For laboratory research only, not for drug, diagnostic or other use. |

Bioinformation

Database links

[GeneID: 115201 Human](#)

[GeneID: 666468 Mouse](#)

[Swiss-port # Q8C9S8 Mouse](#)

[Swiss-port # Q8WYN0 Human](#)

Gene Symbol

ATG4A

Gene Full Name

autophagy related 4A, cysteine peptidase

Background

Autophagy is the process by which endogenous proteins and damaged organelles are destroyed intracellularly. Autophagy is postulated to be essential for cell homeostasis and cell remodeling during differentiation, metamorphosis, non-apoptotic cell death, and aging. Reduced levels of autophagy have been described in some malignant tumors, and a role for autophagy in controlling the unregulated cell growth linked to cancer has been proposed. This gene encodes a member of the autophagin protein family. The encoded protein is also designated as a member of the C-54 family of cysteine proteases. Transcript variants that encode distinct isoforms have been identified. [provided by RefSeq, Jul 2008]

Function

Cysteine protease required for the cytoplasm to vacuole transport (Cvt) and autophagy. Cleaves the C-terminal amino acid of ATG8 family proteins to reveal a C-terminal glycine. 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. Preferred substrate is GABARAPL2 followed by MAP1LC3A and GABARAP. Has also an activity of delipidating enzyme for the PE-conjugated forms. [UniProt]

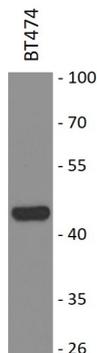
Research Area

Cancer antibody; Cell Biology and Cellular Response antibody; Cell Death antibody; Metabolism antibody

Calculated Mw

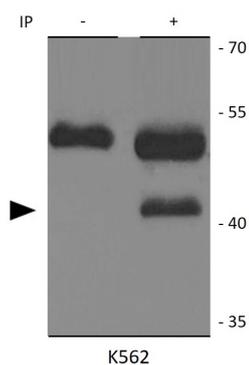
45 kDa

Images



ARG54904 anti-ATG4A antibody WB image

Western blot: BT474 cell lysate stained with ARG54904 anti-ATG4A antibody.



ARG54904 anti-ATG4A antibody IP image

Immunoprecipitation: K562 cell lysate was immunoprecipitated and stained with ARG54904 anti-ATG4A antibody.