

Basic Information

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|---------------------------|---|------------|
| Product Name | Anti-ATG4B Antibody | |
| Gene Name | ATG4B | |
| Source | Rabbit | |
| Clonality | Polyclonal | |
| Isotype | IgG | |
| Species Reactivity | human, mouse, rat | |
| Tested Application | WB, FCM | |
| Contents | 500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol. | |
| Immunogen | E.coli-derived human ATG4B recombinant protein (Position: E17-D328). | |
| Concentration | 500 ug/ml | |
| Purification | Immunogen affinity purified. | |
| Observed MW | 48 kDa | |
| Dilution Ratios | Western blot (WB): | 1:500-2000 |
| | Flow Cytometry (Fixed): | 1:50-200 |
| | Enzyme linked immunosorbent assay (ELISA): | 1:100-1000 |

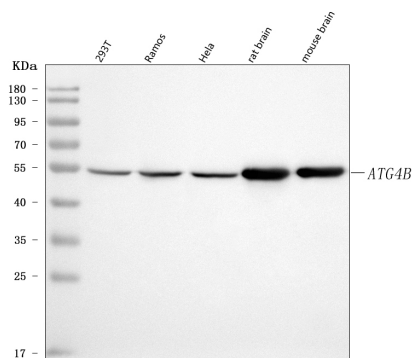
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

Cysteine protease ATG4B is an enzyme that in humans is encoded by the ATG4B gene. 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. Alternate transcriptional splice variants, encoding different isoforms, have been characterized.

Selected Validation Data



Western blot analysis of anti-ATG4B antibody (A02885-2). The sample well of each lane was loaded with 30ug of sample under reducing conditions.

Lane 1: human 293T whole cell lysates,

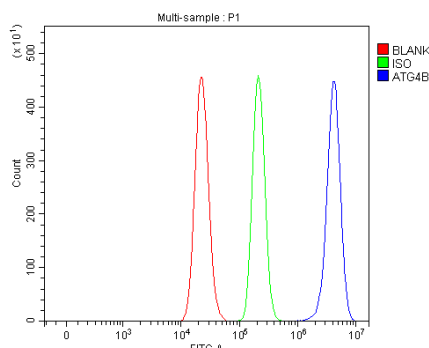
Lane 2: human Ramos whole cell lysates,

Lane 3: human HeLa whole cell lysates,

Lane 4: rat brain tissue lysates,

Lane 5: mouse brain tissue lysates.

Use rabbit anti-ATG4B 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog#EK1002). A specific band was detected for ATG4B at approximately 48-50KD. The expected band size for ATG4B is at 44KD.



Flow Cytometry analysis of RT4 cells using anti-ATG4B antibody (A02885-2).

Overlay histogram showing RT4 cells stained with A02885-2 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer.

The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-ATG4B Antibody (A02885-2) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.