

Product datasheet for AP32201PU-N

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OriGene Technologies, Inc.

ATG4A (369-398) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: IHC, WB

Recommended Dilution: ELISA: 1/1,000.

Western blot: 1/100-1/500.

Immunohistochemistry on Paraffin Sections: 1/50-1/100.

Reactivity: Human, Mouse

Host: Rabbit

Isotype: lg

Clonality: Polyclonal

Immunogen: KLH conjugated synthetic peptide between 369~398 amino acids from the C-term of Human

APG4A

Specificity: This antibody recognizes Human and Mouse ATG4A (369-398).

Other species not tested.

Formulation: PBS containing 0.09% (W/V) Sodium Azide as preservative

State: Purified

State: Liquid purified Ig fraction

Concentration: lot specific

Purification: Saturated Ammonium Sulfate precipitation followed by dialysis against PBS

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: 45378 Da

Gene Name: autophagy related 4A cysteine peptidase

Database Link: Entrez Gene 115201 Human

Q8WYN0





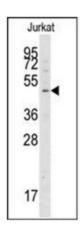
Background:

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). APG4A 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. Preferred substrate is GABARAPL2 followed by MAP1LC3A and GABARAP.

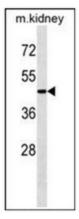
Synonyms:

Cysteine protease ATG4A, ATG4A, APG4A, AUTL2

Product images:

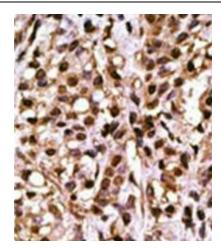


Western blot analysis of ATG4A Antibody in Jurkat cell line lysates (35ug/lane).



Western blot analysis of ATG4A Antibody in Mouse kidney tissue lysates (35ug/lane).







Formalin-Fixed Paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining.

Formalin-Fixed, Paraffin-Embedded human skeletal muscle tissue reacted with Autophagy ATG4A Antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining.