

ATG4D Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1811i

Product Information

Application	IHC-P, WB, E
Primary Accession	Q86TL0
Other Accession	Q684M2 , Q8BGV9
Reactivity	Human
Predicted	Mouse, Pig
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB11866
Antigen Region	326-356

Additional Information

Other Names	Cysteine protease ATG4D, 3422-, AUT-like 4 cysteine endopeptidase, Autophagin-4, Autophagy-related cysteine endopeptidase 4, Autophagy-related protein 4 homolog D, Cysteine protease ATG4D, mitochondrial, ATG4D, APG4D, AUTL4
Target/Specificity	This ATG4D antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 326~356 amino acids surrounding S341 of human APG4D.
Dilution	IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ATG4D Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Background

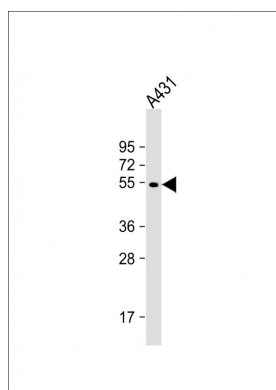
APG4 is a cysteine protease required for autophagy, which cleaves the C-terminal part of either MAP1LC3, GABARAPL2 or GABARAP, allowing the liberation of form I. A subpopulation of form I is subsequently

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. 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).

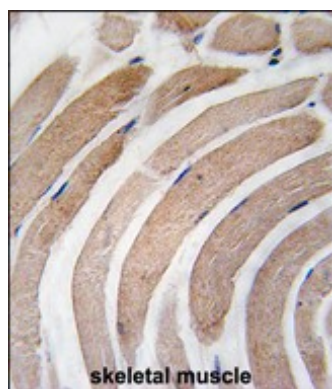
References

- Baehrecke EH. Nat Rev Mol Cell Biol. 6(6):505-10. (2005)
Lum JJ, et al. Nat Rev Mol Cell Biol. 6(6):439-48. (2005)
Greenberg JT. Dev Cell. 8(6):799-801. (2005)
Levine B. Cell. 120(2):159-62. (2005)
Shintani T and Klionsky DJ. Science. 306(5698):990-5. (2004)

Images



Anti APG4D (S341) Antibody at 1:1000 dilution + A431 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 53 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human skeletal muscle tissue reacted with APG4D Antibody (S341) (Cat.#AP1811i), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

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