

Rabbit anti-Mouse ATG4D Polyclonal Antibody | anti-ATG4D antibody

ATG4D Antibody (N-term)

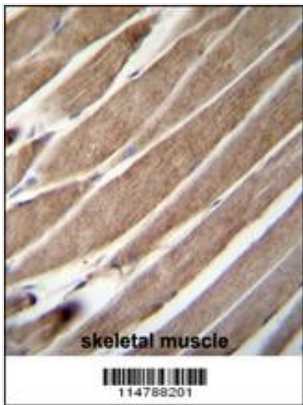
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA288316	Rabbit	Mouse	Immunohistochemistry, Western Blot, ELISA, Immunofluorescence

PRODUCT SYNONYMS

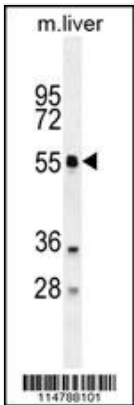
ATG4D; Polyclonal Antibody; ATG4D Antibody (N-term); Cysteine protease ATG4D; 3422-; AUT-like 4 cysteine endopeptidase; Autophagin-4; Autophagy-related cysteine endopeptidase 4; Autophagy-related protein 4 homolog D; mitochondrial; APG4D; AUTL4; anti-ATG4D antibody

PRODUCT SPECIFICATIONS

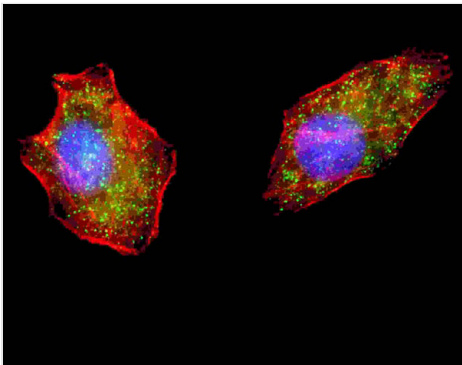
Host	Rabbit
Reactivity	Mouse
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This ATG4D antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 42-71 amino acids from the N-terminal region of human ATG4D.
Purity/Purification	Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Concentration	Vial Concentration: 2 (varies by lot)
Sequence Positions	42-71
Sequence Length	411
Applicable Applications for anti-ATG4D antibody	IHC (Immunohistochemistry), WB (Western Blot), ELISA, IF (Immunofluorescence)
Antigen Type	Synthetic Peptide
Antigen Source	HUMAN
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.



IHC (Immunohistochemistry)
ATG4D Antibody (N-term) immunohistochemistry analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of ATG4D Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



WB (Western Blot)
ATG4D Antibody (N-term) western blot analysis in mouse liver tissue lysates (35ug/lane). This demonstrates the ATG4D antibody detected the ATG4D protein (arrow).



IF (Immunofluorescence)
Fluorescent image of U251 cells stained with ATG4D (N-term) antibody. U251 cells were treated with Chloroquine (50 uM, 16h), then fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.2%, 30 min). Cells were then incubated with AAA288316 ATG4D (N-term) primary antibody (1:200, 2 h at room temperature). For secondary antibody, Alexa Fluor 488 conjugated donkey anti-rabbit antibody (green) was used (1:1000, 1h). Cytoplasmic actin was counterstained with Alexa Fluor 555 (red) conjugated Phalloidin (5.25 uM, 25 min). Nuclei were counterstained with Hoechst 33342 (blue) (10 ug/ml, 5 min). Pictures were taken on a Bioevo microscope (BZ-900, Keyence). ATG4D (N-term) immunoreactivity is localized to autophagic vacuoles in the cytoplasm of U251 cells.

ADDITIONAL INFORMATION

Related Product Information for anti-ATG4D antibody	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.
Product Categories/Family for anti-ATG4D antibody	Cancer; Cardiovascular; Cell Biology; Metabolism; Autophagy

References	References for protein: 1.Betin, V.M., et al. J. Cell. Sci. 122 (PT 14), 2554-2566 (2009) 2.Lamesch, P., et al. Genomics 89(3):307-315(2007) 3.Marino, G., et al. J. Biol. Chem. 278(6):3671-3678(2003) References for U251 cell line: 1. Westermark B.; Pontén J.; Hugosson R. (1973)." Determinants for the establishment of permanent tissue culture lines from human gliomas". Acta Pathol Microbiol Scand A. 81:791-805. [PMID: 4359449]. 2. Pontén, J.,Westermark B. (1978)." Properties of Human Malignant Glioma Cells in Vitro". Medical Biology 56: 184-193.[PMID: 359950]. 3. Geng Y.;Kohli L.; Klocke B.J.; Roth K.A.(2010). "Chloroquine-induced autophagic vacuole accumulation and cell death in glioma cells is p53 independent". Neuro Oncol. 12(5): 473-481.[PMID: 20406898].
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NCBI AND UNIPROT INFORMATION

NCBI GI #	528078306
NCBI GeneID	84971
NCBI Accession #	NP_001268433.1; NP_116274.3
NCBI GenBank Nucleotide #	NM_001281504.1
UniProt Accession #	Q86TL0; Q969K0
Molecular Weight	52922
NCBI Official Full Name	cysteine protease ATG4D isoform 2
NCBI Official Synonym Full Names	autophagy related 4D, cysteine peptidase
NCBI Official Symbol	ATG4D
NCBI Official Synonym Symbols	APG4D; AUTL4; APG4-D
NCBI Protein Information	cysteine protease ATG4D
UniProt Protein Name	Cysteine protease ATG4D
UniProt Gene Name	ATG4D
UniProt Synonym Gene Names	APG4D; AUTL4
UniProt Entry Name	ATG4D_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/atg4d-antibody-immunohistochemistry-western-blot-immunofluorescence-elisa/288316>