

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

ATG4D Antibody (C-term)

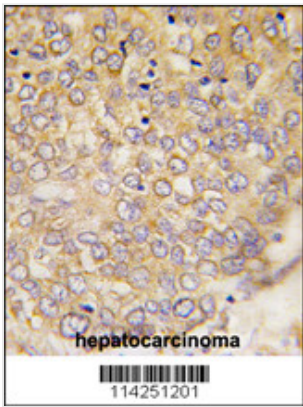
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA290671	Rabbit	Human	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

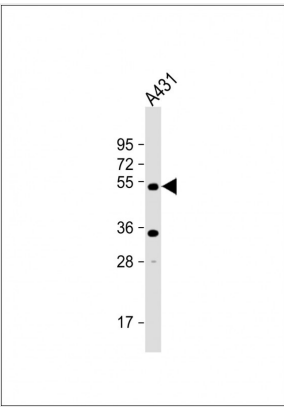
ATG4D; Polyclonal Antibody; ATG4D Antibody (C-term); Cysteine protease ATG4D; 3422-; AUT-like 4 cysteine endopeptidase; Autophagin-4; Autophagy-related cysteine endopeptidase 4; Autophagy-related protein 4 homolog D; mitochondrial; APG4D; AUTL4; anti-ATG4D antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Ig
Specificity	This ATG4D antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 405-437 amino acids from the C-terminal region of human ATG4D.
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.
Sequence Length	411
Applicable Applications for anti-ATG4D antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Subtitle	Purified Rabbit Polyclonal Antibody (Pab)
Cellular Location	Cysteine protease ATG4D: Cytoplasm.
Tissue Location	Mainly expressed in skeletal muscle and, to a lower extent, in testis.
Antigen Region	405-437 aa
Antigen Type	Synthetic Peptide
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)
Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with ATG4D antibody (C-term), 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.



WB (Western Blot)
Anti-ATG4D Antibody (C-term) at 1:1000 dilution + A431 whole cell lysate. Lysates/proteins at 20 ug 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.

ADDITIONAL INFORMATION

Related Product Information for anti-ATG4D antibody	Description: 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). 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. Background: Cysteine protease ATG4D: Cysteine protease required for the cytoplasm to vacuole transport (Cvt) and autophagy. Cleaves the C-terminal amino acid of ATG8 family proteins MAP1LC3 and GABARAPL2, 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. Has also an activity of delipidating enzyme for the PE-conjugated forms.
Product Categories/Family for anti-ATG4D antibody	Primary Antibodies; Antibody Collections; Cancer; Cardiovascular; Cell Biology; Metabolism; Autophagy
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).

NCBI AND UNIPROT INFORMATION

NCBI GI #	528078306
NCBI GeneID	84971
NCBI Accession #	NP_001268433.1
NCBI GenBank Nucleotide #	NM_001281504.1
UniProt Accession #	Q86TL0; Q969K0
Molecular Weight	52922 Da
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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/polyclonal/atg4d-antibody-immunohistochemistry-western-blot-elisa/290671>