

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

ATG4D Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA324649	Rabbit	Human, Mouse	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

ATG4D; Polyclonal Antibody; ATG4D Antibody; 9830134P12Rik; APG4 autophagy 4 homolog D; APG4 D; APG4; S. cerevisiae; homolog of; D; APG4D; ATG4 autophagy related 4 homolog D (S. cerevisiae); Atg4d; ATG4D_HUMAN; Atg4dl; AUT like 4 cysteine endopeptidase; AUT-like 4 cysteine endopeptidase; AUTL4; Autophagin 4; Autophagin-4; autophagy 4; autophagy related 4D; cysteine peptidase; Autophagy related cysteine endopeptidase 4; Autophagy related protein 4 homolog D; Autophagy-related cysteine endopeptidase 4; Autophagy-related protein 4 homolog D; Cysteine protease ATG4D; Cysteine protease involved in autophagy; MGC31226; anti-ATG4D antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	IgG
Specificity	ATG4D antibody detects endogenous levels of total ATG4D
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	411
Applicable Applications for anti-ATG4D antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide
Subcellular Location	Cytoplasm.
Tissue Specificity	Mainly expressed in skeletal muscle and, to a lower extent, in testis.
Predicted Cross Reactivity	Pig, Horse, Dog
Similarity	Pig (80%), Horse (90%), Dog (90%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

AAA324649 staining Hela cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.



IHC (Immunohistochemistry)

AAA324649 at 1/100 staining Mouse testis tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)

Western blot analysis of extracts from K562 cells, using ATG4D antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-ATG4D antibody

Function: 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.

Post-translational Modifications: Cleaved by CASP3 during apoptosis which leads to increased activity. The cleavage by CASP3 reveals a cryptic mitochondrial targeting sequence immediately downstream of their canonical caspase cleavage sites which leads to mitochondrial import of the protein.

Similarity: Residues 64 to 103 constitute a cryptic mitochondrial transit peptide which is revealed after cleavage by caspase of residues 1 to 63 upon oxidative stress and cell death. It acts then as a functional transit peptide, and allows the import of the cleaved protein into the mitochondria (PubMed:22441018). Belongs to the peptidase C54 family.

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	Observed: 53 kD Predicted: 53 kDa
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

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-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/324649>