



# Atg4D Polyclonal Antibody

|                           |   |
|---------------------------|---|
| <b>Catalog No</b>         | BYab-02505  |
| <b>Isotype</b>            | IgG   |
| <b>Reactivity</b>         | Human;Rat;Mouse;  |
| <b>Applications</b>       | WB;IHC;IF;ELISA   |
| <b>Gene Name</b>          | ATG4D   |
| <b>Protein Name</b>       | Cysteine protease ATG4D   |
| <b>Immunogen</b>          | Synthesized peptide derived from the Internal region of human Atg4D.  |
| <b>Specificity</b>        | Atg4D Polyclonal Antibody detects endogenous levels of Atg4D protein.   |
| <b>Formulation</b>        | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.   |
| <b>Source</b>             | Polyclonal, Rabbit,IgG  |
| <b>Purification</b>       | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.   |
| <b>Dilution</b>           | WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200   |
| <b>Concentration</b>      | 1 mg/ml   |
| <b>Purity</b>             | ≥90%  |
| <b>Storage Stability</b>  | -20°C/1 year  |
| <b>Synonyms</b>           | ATG4D; APG4D; AUTL4; Cysteine protease ATG4D; AUT-like 4 cysteine endopeptidase; Autophagin-4; Autophagy-related cysteine endopeptidase 4; Autophagy-related protein 4 homolog D  |
| <b>Observed Band</b>      | 45kD  |
| <b>Cell Pathway</b>       | [Cysteine protease ATG4D]: Cytoplasm .; [Cysteine protease ATG4D, mitochondrial]: Cytoplasm . Mitochondrion matrix . Imported into mitochondrial matrix after cleavage by CASP3 during oxidative stress and cell death. .   |
| <b>Tissue Specificity</b> | Widely expressed in testis.   |
| <b>Function</b>           | enzyme regulation:Inhibited by N-ethylmaleimide.,function: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.,similarity:Belongs to the peptidase C54 family.,tissue specificity:Mainly expressed in skeletal muscle and, to a lower extent, in testis., |

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### Background

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 belongs to the autophagy-related protein 4 (Atg4) family of C54 endopeptidases. Members of this family encode proteins that play a role in the biogenesis of autophagosomes, which sequester the cytosol and organelles for degradation by lysosomes. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2013],

### matters needing attention

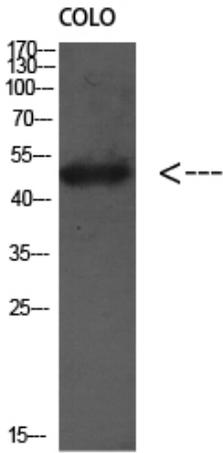
Avoid repeated freezing and thawing!

### Usage suggestions

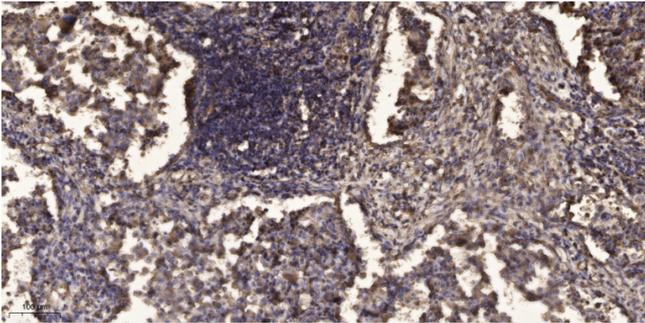
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



## Products Images



Western Blot analysis of Colo using Antibody diluted at 1:1000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human Squamous cell carcinoma of lung. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).