

## Product datasheet

# Anti-ATG4D antibody ab237751

[4 Images](#)

### Overview

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<b>Product name</b>	Anti-ATG4D antibody
<b>Description</b>	Rabbit polyclonal to ATG4D
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human
<b>Immunogen</b>	Recombinant fragment corresponding to Human ATG4D aa 14-43. Database link: <a href="#">Q86TL0</a>
<b>Positive control</b>	WB: A549, HeLa and SH-SY5Y whole cell lysates; Mouse heart tissue lysate. IHC-P: Human small intestine and pancreatic tissues. ICC/IF: PC-3 cells.
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol (glycerin, glycerine), PBS
<b>Purity</b>	Protein G purified
<b>Purification notes</b>	Purity greater than 95%.
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab237751 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/5000. Predicted molecular weight: 53 kDa.
IHC-P		1/500 - 1/1000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		1/50 - 1/500.

## Target

### 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.

### Tissue specificity

Mainly expressed in skeletal muscle and, to a lower extent, in testis.

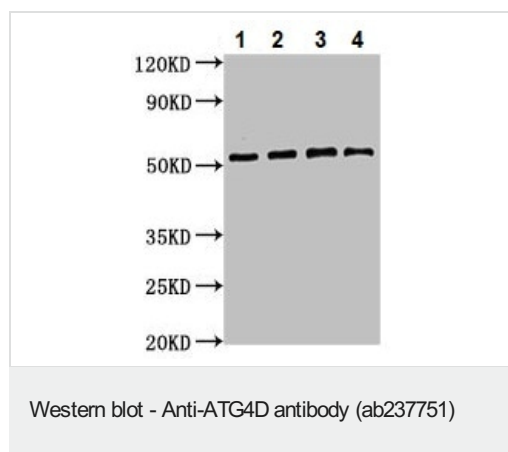
### Sequence similarities

Belongs to the peptidase C54 family.

### Cellular localization

Cytoplasm.

## Images



**All lanes** : Anti-ATG4D antibody (ab237751) at 1/500 dilution

**Lane 1** : A549 (Human lung carcinoma cell line) whole cell lysate

**Lane 2** : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

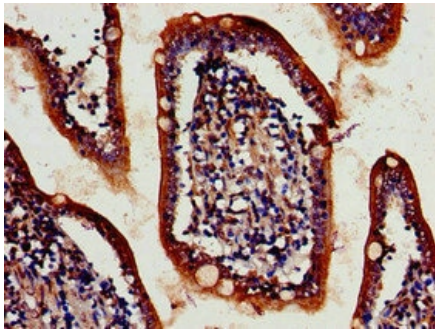
**Lane 3** : SH-SY5Y (Human neuroblastoma cell line from bone marrow) whole cell lysate

**Lane 4** : Mouse heart tissue lysate

### Secondary

**All lanes** : Goat polyclonal to rabbit IgG at 1/50000 dilution

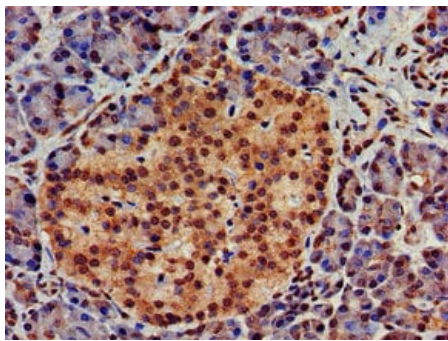
**Predicted band size:** 53 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ATG4D antibody (ab237751)

Paraffin-embedded human small intestine tissue stained for ATG4D using ab237751 at 1/700 dilution in immunohistochemical analysis.

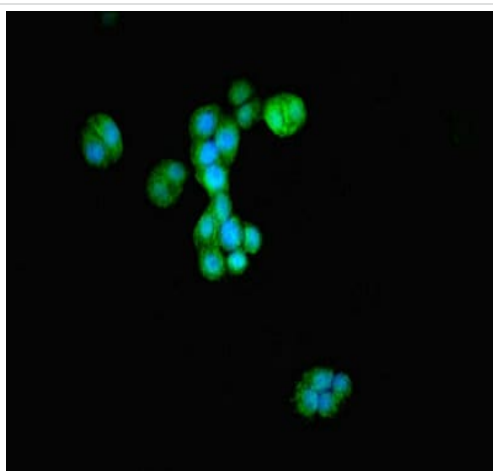
After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30 minutes at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized tissue using an HRP conjugated SP system.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ATG4D antibody (ab237751)

Paraffin-embedded human pancreatic tissue stained for ATG4D using ab237751 at 1/700 dilution in immunohistochemical analysis.

After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30 minutes at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized tissue using an HRP conjugated SP system.



Immunocytochemistry/ Immunofluorescence - Anti-ATG4D antibody (ab237751)

PC-3 (Human prostate adenocarcinoma cell line) cells stained for ATG4D (green) using ab237751 at 1/100 dilution in ICC/IF, followed by an Alexa-Fluor<sup>®</sup>488 conjugated Goat Anti-Rabbit IgG (H+L).

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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