

For Research Use Only

# ATG2A Polyclonal antibody

Catalog Number: 23226-1-AP

Featured Product

11 Publications



## Basic Information

### Catalog Number:

23226-1-AP

### Size:

150ul, Concentration: 600 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG19709

### GenBank Accession Number:

BC110650

### GeneID (NCBI):

23130

### UNIPROT ID:

Q2TAZO

### Full Name:

ATG2 autophagy related 2 homolog A (S. cerevisiae)

### Calculated MW:

1938 aa, 213 kDa

### Observed MW:

215 kDa

### Purification Method:

Antigen Affinity purified

### Recommended Dilutions:

WB 1:1000-1:8000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:250-1:1000

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF, CoIP, Peptide array

### Species Specificity:

human

### Cited Species:

human

### Positive Controls:

WB : K-562 cells, MCF-7 cells, Raji cells

IP : K-562 cells,

IHC : mouse kidney tissue,

IF/ICC : MCF-7 cells,

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

Autophagy-related protein 2 homolog A (ATG2A) belongs to the ATG2 family. ATG2A is a lipid transfer protein involved in autophagosome assembly (PMID:31271352). ATG2A tethers the edge of the isolation membrane (IM) to the endoplasmic reticulum (ER) and mediates direct lipid transfer from ER to IM for IM expansion. ATG2A binds to the ER exit site (ERES), which is the membrane source for autophagosome formation, and extracts phospholipids from the membrane source and transfers them to ATG9 (ATG9A or ATG9B) to the IM for membrane expansion (PMID: 30952800, PMID: 31271352). ATG2A also regulates lipid droplet morphology and distribution within the cell (PMID: 28561066). The observed MW of ATG2A is 215 kDa.

## Notable Publications

Author	Pubmed ID	Journal	Application
Jay Xiaojun Tan	36071159	Nature	WB
Ying Li	33124742	FASEB J	WB
Elodie Mailler	34799570	Nat Commun	IF

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1%BSA

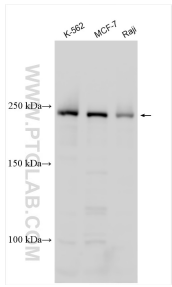
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

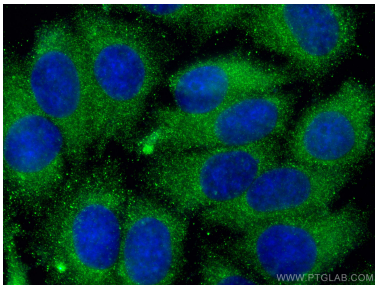
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

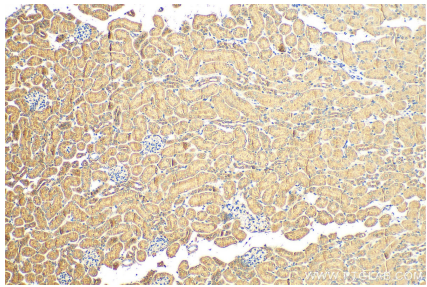
Selected Validation Data



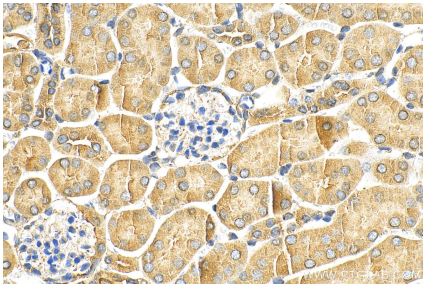
Various lysates were subjected to SDS PAGE followed by western blot with 23226-1-AP (ATG2A antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



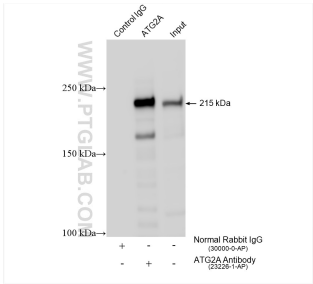
Immunofluorescent analysis of (-20°C Methanol) fixed MCF-7 cells using ATG2A antibody (23226-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 23226-1-AP (ATG2A antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 23226-1-AP (ATG2A antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-ATG2A (IP:23226-1-AP, 4ug; Detection:23226-1-AP 1:4000) with K-562 cells lysate 2400 ug.