

For Research Use Only

# ATG16L1 Polyclonal antibody

Catalog Number: 29445-1-AP

6 Publications



## Basic Information

<b>Catalog Number:</b> 29445-1-AP	<b>GenBank Accession Number:</b> BC000061	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul, Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 55054	<b>Recommended Dilutions:</b> WB 1:1000-1:6000 IHC 1:200-1:800 IF/ICC 1:50-1:500
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q676U5	
<b>Isotype:</b> IgG	<b>Full Name:</b> ATG16 autophagy related 16-like 1 (S. cerevisiae)	
<b>Immunogen Catalog Number:</b> AG31318	<b>Calculated MW:</b> 607 aa, 68 kDa	
	<b>Observed MW:</b> 68-75 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, ELISA

**Cited Applications:**  
WB, IHC, IF

**Species Specificity:**  
Human, mouse, rat

**Cited Species:**  
human, mouse

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

**Positive Controls:**

**WB:** COLO 320 cells, HSC-T6 cells, HEK-293 cells, MCF-7 cells

**IHC:** human colon cancer tissue,

**IF/ICC:** HEK-293 cells,

## Background Information

Human ATG16L1 is a 607 amino acid protein (~68 kDa) comprising three major domains: the N-terminal ATG5 binding domain (ATG5-BD), the central coiled-coil domain (CCD) and a predicted C-terminal WD40-domain. ATG16L1 $\alpha$  and  $\beta$  (Atg16L1 $\alpha$ , 63 kDa; and Atg16L1 $\beta$ , 71 kDa) are the major isoforms expressed in intestinal epithelium and macrophages, and all isoforms encode exon 9, which contains Thr 300. Atg16L1 mediates the cellular degradative process of autophagy and is considered a critical regulator of inflammation based on its genetic association with inflammatory bowel disease. ATG16L1 has been implicated in Crohn's disease. (PMID: 24553140, PMID: 22740627, PMID: 28685931)

## Notable Publications

Author	Pubmed ID	Journal	Application
Jian Fang	35297435	Food Funct	WB
Xiaoyi Zhang	35946506	Anticancer Drugs	WB
Xueying Wang	39893643	J Cell Mol Med	WB,IF

## Storage

**Storage:**

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

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

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

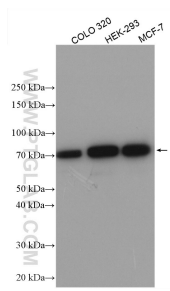
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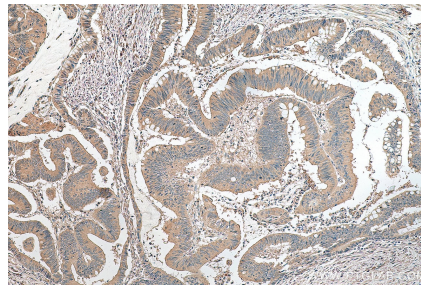
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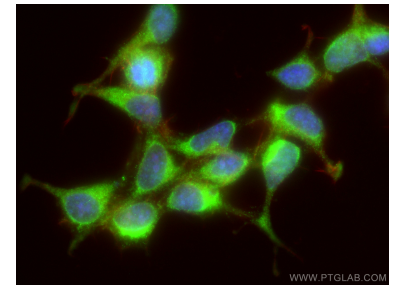
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 29445-1-AP (ATG16L1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 29445-1-AP (ATG16L1 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using ATG16L1 antibody (29445-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).