### For Research Use Only

# ATG16L1 Polyclonal antibody

Catalog Number:29445-1-AP 5 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: 29445-1-AP BC000061 GeneID (NCBI): Concentration: 1000 μg/ml 55054 **UNIPROT ID:** Source: Rabbit Q676U5 Full Name:

Antigen affinity purification Recommended Dilutions: WB 1:1000-1:6000 IHC 1:200-1:800 IF/ICC 1:50-1:500

**Purification Method:** 

Isotype:

ATG16 autophagy related 16-like 1 (S. cerevisiae) Immunogen Catalog Number:

AG31318 Calculated MW: 607 aa, 68 kDa

Observed MW: 68-75 kDa

**Applications** 

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

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-

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.

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

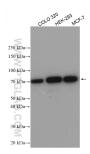
Aliquoting is unnecessary for -20°C storage

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

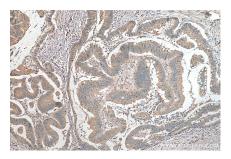
T: 4006900926 E: Proteintech-CN@ptglab.com

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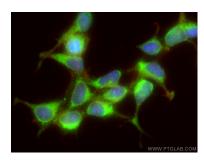
## **Selected Validation Data**



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 paraffinembedded 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).