



# Atg16 Monoclonal Antibody

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| <b>Catalog No</b>                  | YP-mAb-02500                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Applications</b>                | WB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Gene Name</b>                   | ATG16L1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Immunogen</b>                   | Synthesized peptide derived from Atg16 . at AA range: 60-140                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Specificity</b>                 | Atg16 Monoclonal Antibody detects endogenous levels of Atg16 protein.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Source</b>                      | Monoclonal, Mouse,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Purification</b>                | The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Dilution</b>                    | WB 1:500-1:2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Synonyms</b>                    | APG16 like 1;APG16L;APG16-like 1;ATG16L;Autophagy-related protein 16-1; Atg16;ATG16L1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Observed Band</b>               | 70kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Calculated Molecular Weight</b> | 70kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Cell Pathway</b>                | Cytoplasm . Preautophagosomal structure membrane ; Peripheral membrane protein . Endosome membrane ; Peripheral membrane protein . Lysosome membrane ; Peripheral membrane protein . Recruited to omegasomes membranes by WIPI2 (By similarity). Omegasomes are endoplasmic reticulum connected strutures at the origin of preautophagosomal structures (By similarity) . Localized to preautophagosomal structure (PAS) where it is involved in the membrane targeting of ATG5 (By similarity). Localizes also to discrete punctae along the ciliary axoneme (By similarity). Upon activation of non-canonical autophagy, recruited to single-membrane endolysosomal compartments (PubMed:29317426). . |
| <b>Tissue Specificity</b>          | Brain,Colon,Epithelium,Fetal brain,Human lung,Mammary gland,Placenta,Small                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Function</b>                    | disease:Genetic variations in ATG16L1 are associated with susceptibility to inflammatory bowel disease type 10 (IBD10) [MIM:611081]. IBD is characterized by a chronic relapsing intestinal inflammation. IBD is subdivided into Crohn                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |



disease (CD) and ulcerative colitis phenotypes. IBD10 individuals show the phenotype characteristic to CD. It may involve any part of the gastrointestinal tract, but most frequently the terminal ileum and colon. CD is commonly classified as autoimmune disease.,function:Plays an essential role in autophagy., sequence caution:Wrong choice of CDS.,similarity:Belongs to the WD repeat ATG16 family.,similarity:Contains 7 WD repeats.,subcellular location:Localized to preautophagosomal structure (PAS) where it is involved in the membrane targeting of ATG5.,subunit:Homooligomer. Interacts with ATG5. Part of either the minor and major complexes respectively composed of 4

#### Background

The protein encoded by this gene is part of a large protein complex that is necessary for autophagy, the major process by which intracellular components are targeted to lysosomes for degradation. Defects in this gene are a cause of susceptibility to inflammatory bowel disease type 10 (IBD10). Several transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Jun 2010],

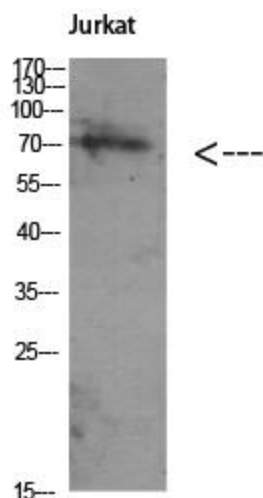
#### matters needing attention

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 various cells using Atg16 Monoclonal Antibody