

ATG9A Antibody
Rabbit mAb
Catalog # AP90707**Specification**

ATG9A Antibody - Product Information

Application	WB, IHC, ICC, IP
Primary Accession	O7Z3C6
Reactivity	Rat
Clonality	Monoclonal

Other Names

ATG9A; APG9-like 1; Autophagy 9-like 1 protein; Autophagy-related protein 9A; MGD3208; MATG9; APG9 autophagy 9-like 1; APG9L1; Autophagy related 9A;

Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	94447 Da

ATG9A Antibody - Additional Information

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human ATG9A
Description	Involved in autophagy and cytoplasm to vacuole transport (Cvt) vesicle formation. Plays a key role in the organization of the preautophagosomal structure/phagophore assembly site (PAS), the nucleating site for formation of the sequestering vesicle.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

ATG9A Antibody - Protein Information

Name ATG9A {ECO:0000303|PubMed:20124090, ECO:0000312|HGNC:HGNC:22408}

Function

Phospholipid scramblase involved in autophagy by mediating autophagosomal membrane expansion (PubMed: [22456507](http://www.uniprot.org/citations/22456507))

target="_blank">22456507, PubMed: [27510922](http://www.uniprot.org/citations/27510922) target="_blank">27510922, PubMed: [29437695](http://www.uniprot.org/citations/29437695) target="_blank">29437695, PubMed: [32513819](http://www.uniprot.org/citations/32513819) target="_blank">32513819, PubMed: [32610138](http://www.uniprot.org/citations/32610138) target="_blank">32610138, PubMed: [33106659](http://www.uniprot.org/citations/33106659) target="_blank">33106659, PubMed: [33468622](http://www.uniprot.org/citations/33468622) target="_blank">33468622, PubMed: [33850023](http://www.uniprot.org/citations/33850023)

target="_blank">33850023). Cycles between the preautophagosomal structure/phagophore assembly site (PAS) and the cytoplasmic vesicle pool and supplies membrane for the growing autophagosome (PubMed:16940348, PubMed:22456507, PubMed:33106659). Lipid scramblase activity plays a key role in preautophagosomal structure/phagophore assembly by distributing the phospholipids that arrive through ATG2 (ATG2A or ATG2B) from the cytoplasmic to the luminal leaflet of the bilayer, thereby driving autophagosomal membrane expansion (PubMed:33106659). Also required to supply phosphatidylinositol 4- phosphate to the autophagosome initiation site by recruiting the phosphatidylinositol 4-kinase beta (PI4KB) in a process dependent on ARFIP2, but not ARFIP1 (PubMed:30917996). In addition to autophagy, also plays a role in necrotic cell death (By similarity).

Cellular Location

Preautophagosomal structure membrane; Multi-pass membrane protein. Cytoplasmic vesicle, autophagosome membrane; Multi- pass membrane protein. Golgi apparatus, trans-Golgi network membrane; Multi-pass membrane protein. Late endosome membrane; Multi-pass membrane protein. Recycling endosome membrane; Multi-pass membrane protein. Endoplasmic reticulum membrane; Multi-pass membrane protein. Mitochondrion membrane; Multi-pass membrane protein. Note=Mainly localizes to the trans-Golgi network (TGN) and the endosomal system; cycles between them though vesicle trafficking (PubMed:27316455, PubMed:27663665). Export from the TGN to promote formation of autophagosomes is mediated by the AP-4 complex (PubMed:29180427, PubMed:30262884). Under amino acid starvation or rapamycin treatment, redistributes to preautophagosomal structure/phagophore assembly site (PAS) (PubMed:16940348). The starvation-induced redistribution depends on ULK1, ATG13, as well as SH3GLB1 (PubMed:16940348). Upon autophagy induction, a small portion transiently localizes to the autophagic membranes (PubMed:22456507) Recruited to damaged mitochondria during mitophagy in a RIMOC1- dependent manner (PubMed:34432599).

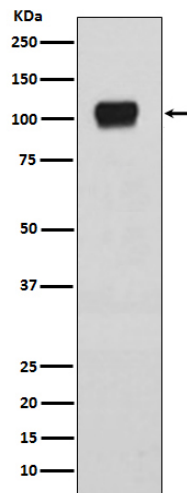
ATG9A Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ATG9A Antibody - Images





Western blot analysis of ATG9A expression in HepG2 cell lysate.