

# Anti-ATG9A Rabbit Monoclonal Antibody

Catalog # ABO13670

## Product Information

|                          |                                                                                                                                  |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | WB, IHC, IF, ICC, IP                                                                                                             |
| <b>Primary Accession</b> | <a href="#">Q7Z3C6</a>                                                                                                           |
| <b>Host</b>              | Rabbit                                                                                                                           |
| <b>Isotype</b>           | Rabbit IgG                                                                                                                       |
| <b>Reactivity</b>        | Rat, Human, Mouse                                                                                                                |
| <b>Clonality</b>         | Monoclonal                                                                                                                       |
| <b>Format</b>            | Liquid                                                                                                                           |
| <b>Description</b>       | Anti-ATG9A Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP applications. This antibody reacts with Human, Mouse, Rat. |

## Additional Information

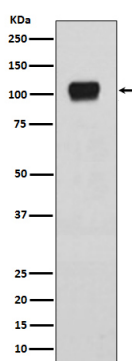
|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene ID</b>                  | 79065                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Other Names</b>              | Autophagy-related protein 9A, APG9-like 1, mATG9, ATG9A<br>{ECO:0000303   PubMed:20124090, ECO:0000312   HGNC:HGNC:22408}                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Calculated MW</b>            | 94447                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Application Details</b>      | WB 1:1000-1:2000<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200<br>IP 1:50                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Subcellular Localization</b> | 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. Endoplasmic reticulum membrane; Multi-pass membrane protein. Under amino acid starvation or rapamycin treatment, redistributes from a juxtanuclear clustered pool to a dispersed peripheral cytosolic pool. The starvation- induced redistribution depends on ULK1, ATG13, as well as SH3GLB1. |
| <b>Source</b>                   | Eukaryota                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Contents</b>                 | Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Clone Names</b>              | Clone: FGF-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Immunogen</b>                | A synthesized peptide derived from human ATG9A                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Purification</b>             | Affinity-chromatography                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Storage</b>                  | Store at -20°C for one year. For short term storage and frequent use, store at                                                                                                                                                                                                                                                                                                                                                                                                                            |

4°C for up to one month. Avoid repeated freeze-thaw cycles.

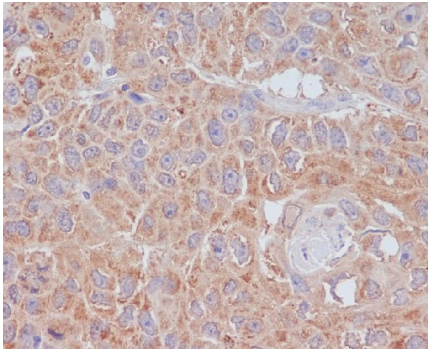
## Protein Information

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>              | ATG9A {ECO:0000303   PubMed:20124090, ECO:0000312   HGNC:HGNC:22408}                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Function</b>          | Phospholipid scramblase involved in autophagy by mediating autophagosomal membrane expansion (PubMed: <a href="#">22456507</a> , PubMed: <a href="#">27510922</a> , PubMed: <a href="#">29437695</a> , PubMed: <a href="#">32513819</a> , PubMed: <a href="#">32610138</a> , PubMed: <a href="#">33106659</a> , PubMed: <a href="#">33468622</a> , PubMed: <a href="#">33850023</a> ). Cycles between the preautophagosomal structure/phagophore assembly site (PAS) and the cytoplasmic vesicle pool and supplies membrane for the growing autophagosome (PubMed: <a href="#">16940348</a> , PubMed: <a href="#">22456507</a> , PubMed: <a href="#">33106659</a> ). 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: <a href="#">33106659</a> ). 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: <a href="#">30917996</a> ). In addition to autophagy, also plays a role in necrotic cell death (By similarity). |
| <b>Cellular Location</b> | 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).                                                                                                  |

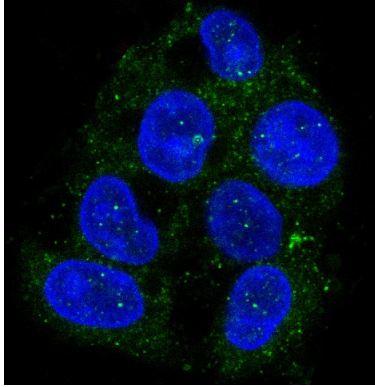
## Images



Western blot analysis of ATG9A expression in HepG2 cell lysate.



Immunohistochemical analysis of paraffin-embedded human lung cancer, using ATG9A Antibody.



Immunofluorescent analysis of Hepg2 cells, using ATG9A Antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.