Anti-ATG9A Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R016085

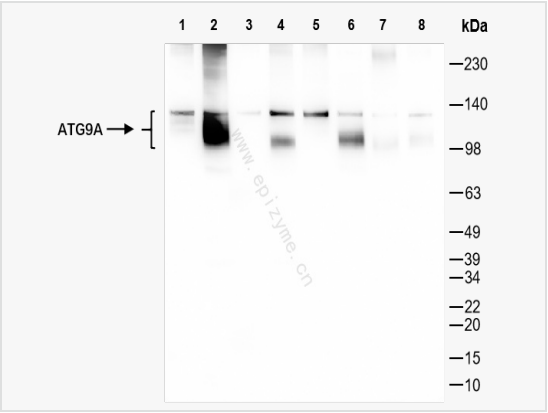
Product Information

Application	WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	36G03F07
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human ATG9A
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-ATG9A Rabbit mAb [36G03F07] is for research use only and not for use in diagnostic or therapeutic procedures.

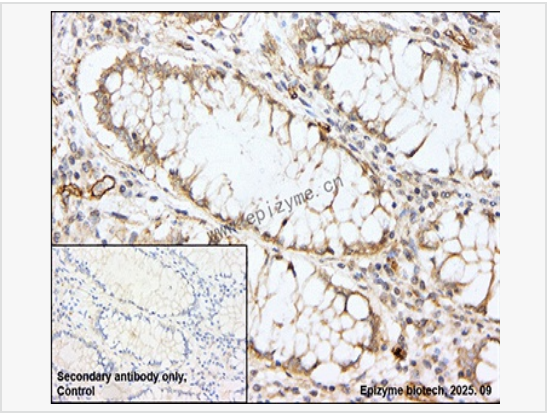
Protein Information

Synonyms	APG9L1; MGD3208; mATG9; Atg9; Atg9l1; RGD1310450; ATG9A_HUMAN; ATG9A; APG9-like 1; ATG9A_MOUSE; ATG9A_RAT.
Calculated MW	Calculated MW: 95 kDa; Observed MW: 100-110 kDa
Uniprot ID	Q7Z3C6
Gene ID	79065
Background	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. Cycles between a juxta-nuclear trans-Golgi network compartment and late endosomes. Nutrient starvation induces accumulation on autophagosomes. Starvation-dependent trafficking requires ULK1, ATG13 and SUPT20H.
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 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

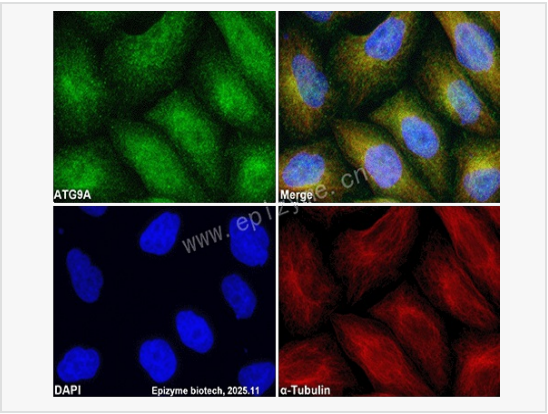
Validation Images



Western Blot - Anti-ATG9A Rabbit mAb [36G03F07]
All lanes: R016085 at 1:2,000 dilution
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates
Lane 3: K562 (Human chronic myeloid leukemia cell) whole cell lysates
Lane 4: 293T (Human embryonic kidney cell) whole cell lysates
Lane 5: MCF-7 (human breast adenocarcinoma epithelial cell) whole cell lysates
Lane 6: U87 (Human malignant glioblastoma epithelial cells) whole cell lysates
Lane 7: Raw264.7 (Mouse mononuclear macrophage leukemia cell) whole cell lysates
Lane 8: PC-12 (Rat adrenal pheochromocytoma epithelial cell) whole cell lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 95 kDa
Observed band size: 100-110 kDa
Developed using the ECL technique (Cat. No. SQ201).



Immunohistochemistry - Anti-ATG9A Rabbit mAb [36G03F07]
Sample: Paraformaldehyde-fixed, paraffin embedded human colonic cancer tissue
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
Primary antibody: R016085 at 1:200 dilution
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.
Counter stained with hematoxylin.
Positive/negative staining were presented.
Only the secondary antibody was used as the negative control.



Immunofluorescence - Anti-ATG9A Rabbit mAb [36G03F07]
Sample: HeLa cells
The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.
Primary antibodies: R016085 at 1:100 dilution and α-tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution
Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)
Nuclei were stained with DAPI (shown in blue).