

Product datasheet for TA336522

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ATG9A Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: FC, ICC/IF, IHC, IP, WB

Recommended Dilution: Immunocytochemistry/ Immunofluorescence, Immunoprecipitation, Immunohistochemistry-

Frozen, Immunohistochemistry-Paraffin: 1:100-1:250, Western Blot: 2 ug/ml, Flow Cytometry,

Immunohistochemistry: 1:100-1:250

Reactivity: Human, Mouse, Rat, Bovine, Chicken, Primate

Host: Rabbit

Clonality: Polyclonal

Immunogen: A synthetic peptide made to a region within the C-terminus of human ATG9A (between

residues 750-839). [Swiss-Prot# Q7Z3C6].

Formulation: PBS, 30% glycerol, 0.1% Sodium Azide. Aliquot and store at -20C or -80C. Avoid freeze-thaw

cycles.

Concentration: lot specific

Purification: Immunogen affinity purified

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 95 kDa

Gene Name: autophagy related 9A

Database Link: NP 076990

Entrez Gene 245860 MouseEntrez Gene 363254 RatEntrez Gene 79065 Human

Q7Z3C6





Background:

ATG9A (autophagy-related protein 9A) is the only transmembrane member identified among the classical ATG proteins family which are essential to autophagy. Yeast ATG9 protein localizes to the pre-autophagosomal structure (PAS) as well as cytoplasmic punctate structures, whereas, the mammalian ATG9A localizes to endocytic compartments, the trans-Golgi network and autophagic membranes. Moreover, ATG9 is recruited to the PAS in an ATG11-dependent manner under nutrient-rich conditions, whereas during starvation, recruitment of ATG9 depends on Atg17p. ATG9A does not steadily reside at one place in cells, but rather dynamically shuttles between a juxta-nuclear trans-Golgi network compartment and late endosomes under autophagic or starvation conditions. Moreover, ATG9A accumulation is upregulated upon starvation in autophagosomes and the starvation-dependent trafficking requires ULK1, ATG13 and SUPT20H. ATG9A interacts with SUPT20H and has been proposed to mediate membrane transport to generate autophagosomes.

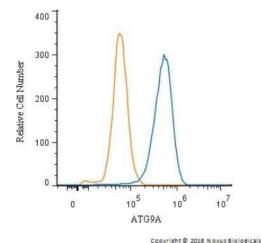
Synonyms: APG9L1; mATG9; MGD3208

Note: This ATG9A antibody is useful for Immunohistochemistry paraffin embedded sections and Western blot. In Western blot this antibody recognizes a band at ~95 kDa, representing ATG9A protein. Boiling samples prior to running the gel may affect the protein. Use in

Immunocytochemistry/immunofluorescence reported in scientific literature (PMID 24705551)

Protein Families: Transmembrane

Product images:

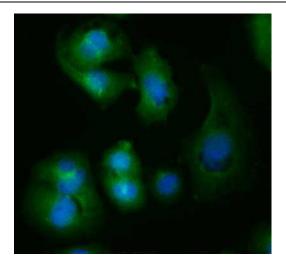


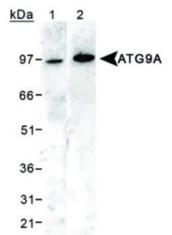
with TA336522 and a matched isotype control. Cells were fixed with 4% PFA and then permeablized with 0.1% saponin. Cells were incubated in an antibody dilution of 2.5 ug/mL for 30 minutes at room temperature, followed by Rabbit IgG APC-conjugated Secondary Antibody (R&D Systems, F0111).

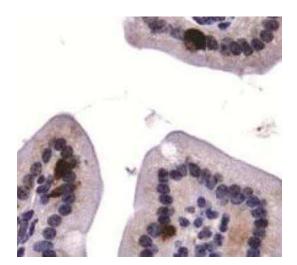
Flow Cytometry: ATG9A Antibody TA336522 - An

intracellular stain was performed on Hela Cells









Immunocytochemistry/Immunofluorescence: ATG9A Antibody TA336522 - Neuro2a cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X PBS + 0.05% Triton X-100. The cells were incubated with anti-ATG9A at 2 ug/ml overnight at 4C and detected with an anti-rabbit DyLight 488 (Green) at a 1:500 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.

Western Blot: ATG9A Antibody TA336522 - Detection of ATG9A protein in HEK293 lysates using TA336522. (1) siRNA ATG9A knockdown and (2) wildtype ATG9A.

Immunohistochemistry: ATG9A Antibody TA336522 - Staining in mouse intestine.