

Anti-Apg7 / ATG7 Antibody (C-Terminus) Rabbit Anti Human Polyclonal Antibody Catalog # ALS17590

Specification

Anti-Apg7 / ATG7 Antibody (C-Terminus) - Product Information

Application Primary Accession Predicted Host Clonality Isotype Calculated MW WB, IHC-P, ICC <u>095352</u> Human, Mouse Rabbit Polyclonal IgG 77960

Anti-Apg7 / ATG7 Antibody (C-Terminus) - Additional Information

Gene ID 10533

Alias Symbol ATG7 Other Names ATG7, Apg7, APG7L, APG7-LIKE, Autophagy related 7, Autophagy-related protein 7, HAGP7, GSA7

Target/Specificity Recognizes human APG7.

Reconstitution & Storage Immunoaffinity purified

Precautions Anti-Apg7 / ATG7 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-Apg7 / ATG7 Antibody (C-Terminus) - Protein Information

Name ATG7 (<u>HGNC:16935</u>)

Synonyms APG7L

Function

E1-like activating enzyme involved in the 2 ubiquitin-like systems required for cytoplasm to vacuole transport (Cvt) and autophagy. Activates ATG12 for its conjugation with ATG5 as well as the ATG8 family proteins for their conjugation with phosphatidylethanolamine. Both systems are needed for the ATG8 association to Cvt vesicles and autophagosomes membranes. Required for autophagic death induced by caspase-8 inhibition. Facilitates LC3-I lipidation with phosphatidylethanolamine to form LC3-II which is found on autophagosomal membranes (PubMed:34161705). Required for mitophagy which contributes to regulate mitochondrial quantity and quality by eliminating the mitochondria to a basal level to fulfill cellular energy requirements and preventing



excess ROS production. Modulates p53/TP53 activity to regulate cell cycle and survival during metabolic stress. Also plays a key role in the maintenance of axonal homeostasis, the prevention of axonal degeneration, the maintenance of hematopoietic stem cells, the formation of Paneth cell granules, as well as in adipose differentiation. Plays a role in regulating the liver clock and glucose metabolism by mediating the autophagic degradation of CRY1 (clock repressor) in a time-dependent manner (By similarity).

Cellular Location

Cytoplasm. Preautophagosomal structure. Note=Localizes also to discrete punctae along the ciliary axoneme and to the base of the ciliary axoneme

Tissue Location

Widely expressed, especially in kidney, liver, lymph nodes and bone marrow.

Anti-Apg7 / ATG7 Antibody (C-Terminus) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Apg7 / ATG7 Antibody (C-Terminus) - Images