abcam

Product datasheet

Anti-Apg7 antibody ab89775

3 References 2 Images

Overview

Product name	Anti-Apg7 antibody
Description	Mouse polyclonal to Apg7
Host species	Mouse
Tested applications	**Suitable for:** WB
Species reactivity	**Reacts with:** Human
Immunogen	Full length protein corresponding to amino acids 1 - 703 of Human Apg7 (NP_006386.1)
Positive control	HepG2 cell lysate

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	Preservative: None Constituents: 1X PBS, pH 7.2
Purity	Protein A purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab89775** in the following tested applications.

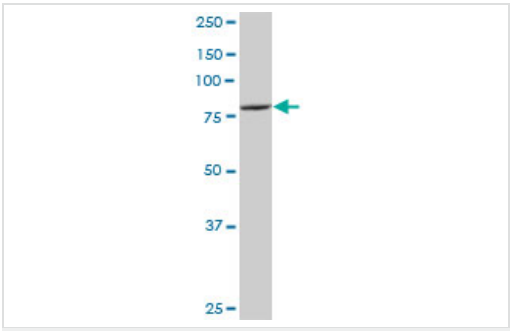
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 1 µg/ml. Predicted molecular weight: 78 kDa.

Target

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. 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. Plays also 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.
Tissue specificity	Widely expressed, especially in kidney, liver, lymph nodes and bone marrow.
Sequence similarities	Belongs to the ATG7 family.
Domain	The C-terminal part of the protein is essential for the dimerization and interaction with ATG3 and ATG12. The N-terminal FAP motif (residues 15 to 17) is essential for the formation of the ATG89-PE and ATG5-ATG12 conjugates.
Post-translational modifications	Acetylated by EP300.
Cellular localization	Cytoplasm. Preautophagosomal structure. Localizes also to discrete punctae along the ciliary axoneme and to the base of the ciliary axoneme.

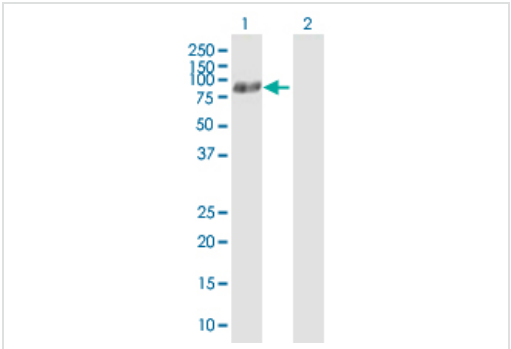
Images



Western blot - Apg7 antibody (ab89775)

Anti-Apg7 antibody (ab89775) at 1 µg/ml +
HepG2 cell lysate at 50 µg

Predicted band size: 78 kDa



Western blot - Apg7 antibody (ab89775)

All lanes : Anti-Apg7 antibody (ab89775) at 1 µg/ml

Lane 1 : Apg7-transfected 293T cell lysate
Lane 2 : non transfected lysate

Lysates/proteins at 25 µg per lane.

Predicted band size: 78 kDa

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