

Product Name: KD-Validated ATG7 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA01794**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:10,000-1:50,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 78.0kDa

Antigen Information

Gene Name	ATG7
Alternative Names	ATG7; Autophagy Related 7; Ubiquitin-Activating Enzyme E1-Like Protein; Ubiquitin-Like Modifier-Activating Enzyme ATG7; ATG12-Activating Enzyme E1 ATG7; APG7L; HAGP7; ATG7 Autophagy Related 7 Homolog (S. Cerevisiae); APG7 Autophagy 7-Like (S. Cerevisiae); Autophagy-Related Protein 7; APG7 Autophagy 7-Like; APG7-LIKE; APG7-Like; GSA7
Gene ID	10533.0
SwissProt ID	O95352
Immunogen	A synthesized peptide derived from human ATG7

Background

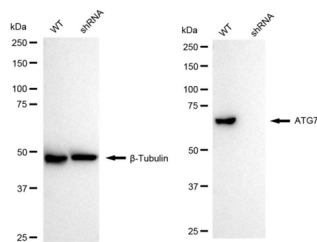
This gene encodes an E1-like activating enzyme that is essential for autophagy and cytoplasmic to vacuole transport. The

encoded protein is also thought to modulate p53-dependent cell cycle pathways during prolonged metabolic stress. It has been associated with multiple functions, including axon membrane trafficking, axonal homeostasis, mitophagy, adipose differentiation, and hematopoietic stem cell maintenance. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015]

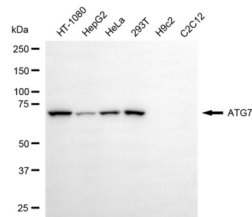
Research Area

Cell Biology, Signal Transduction, Cardiovascular, Cancer, Metabolism, Neuroscience

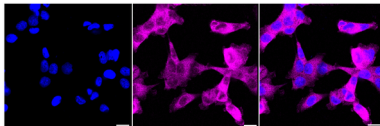
Image Data



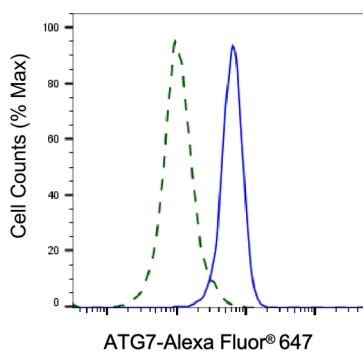
Western blotting analysis using ATG7 antibody (KVA01794). ATG7 expression in wild type (WT) and ATG7 shRNA knockdown (KD) 293T cells with 20 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with ATG7 antibody (KVA01794, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



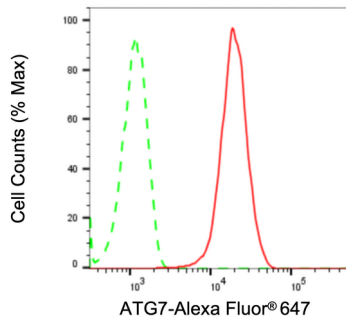
Western blotting analysis using ATG7 antibody (KVA01794). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with ATG7 antibody (KVA01794, 1:50,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HT-1080 cells with ATG7 antibody (KVA01794, 1:1,000). Nuclei were stained blue with DAPI; ATG7 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser intensity and smart gain: Medium. Scale bar: 20 µm.



Validation of ATG7 knockdown using flow cytometry. Wild-type (WT, Blue) and knockdown (KD, Green) 293T cells were stained with ATG7 antibody (KVA01794, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of ATG7 expression in HepG2 cells using ATG7 antibody (KVA01794, 1:2,000). Green, isotype control; red, ATG7.