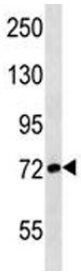
ATG7 Antibody (F46227)

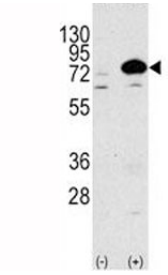
Catalog No.	Formulation	Size
F46227-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F46227-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

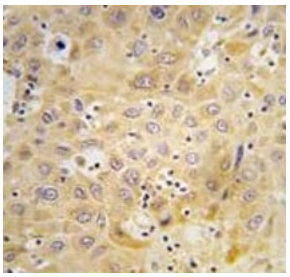
Availability	1-3 business days
Species Reactivity	Human, Mouse
Predicted Reactivity	Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	O95352
Applications	Western Blot : 1:1000 IHC (Paraffin) : 1:50-1:100
Limitations	This ATG7 antibody is available for research use only.



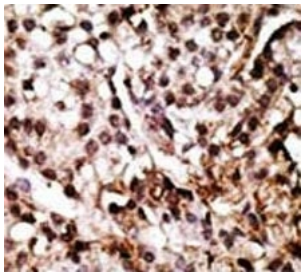
ATG7 antibody western blot analysis in Jurkat lysate. Predicted molecular weight: 70-80 kDa.



Western blot analysis of ATG7 antibody and 293 lysate transiently transfected with the human gene. Predicted molecular weight: 70-80 kDa.



IHC analysis of FFPE human hepatocarcinoma tissue stained with ATG7 antibody



IHC analysis of FFPE human breast carcinoma tissue stained with the ATG7 antibody

Description

ATG7 is an 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. [UniProt]

Application Notes

Titration of the ATG7 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 22-51 from the human protein was used as the immunogen for this ATG7 antibody.

Storage

Aliquot the ATG7 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.