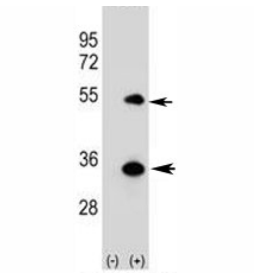
ATG5 Antibody (F46218)

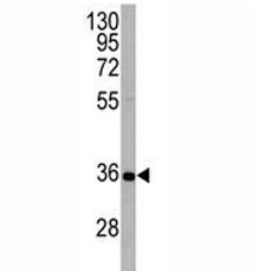
Catalog No.	Formulation	Size
F46218-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F46218-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

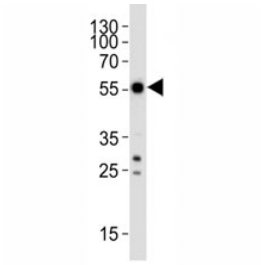
Availability	1-3 business days
Species Reactivity	Human, Mouse
Predicted Reactivity	Rat, Bovine, Pig
Format	Purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	Q9H1Y0
Applications	Western Blot : 1:1000 Immunofluorescence : 1:200 IHC (Paraffin) : 1:50-1:100
Limitations	This ATG5 antibody is available for research use only.



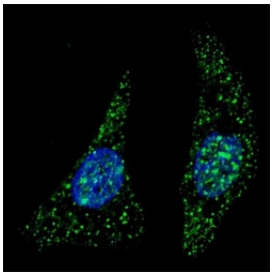
Western blot analysis of ATG5 antibody and 293 cell lysate (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (2) with the human gene. Predicted molecular weight ATG5: ~32 kDa; ATG5/ATG12 heterodimer: ~56 kDa.



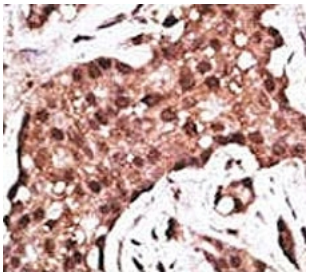
APG5 antibody western blot analysis in HeLa lysate. Predicted molecular weight ATG5: ~32 kDa; ATG5/ATG12 heterodimer: ~56 kDa.



Western blot analysis of lysate from SH-SY5Y cell line using APG5/ ATG5 antibody at 1:1000. Predicted molecular weight ATG5: ~32 kDa; ATG5/ATG12 heterodimer: ~56 kDa.



Fluorescent image of U251 cells stained with ATG5 antibody at 1:200. Immunoreactivity is localized to autophagic vacuoles in the cytoplasm.



IHC analysis of FFPE human breast carcinoma tissue stained with the ATG5 antibody

Description

ATG5 is involved in autophagic vesicle formation. Conjugation with ATG12, through a ubiquitin-like conjugating system involving ATG7 as an E1-like activating enzyme and ATG10 as an E2-like conjugating enzyme, is essential for its function. The ATG12/ATG5 conjugate acts as an E3-like enzyme which is required for lipidation of ATG8 family proteins and their association to the vesicle membranes. Involved in mitochondrial quality control after oxidative damage, and in subsequent cellular longevity. The ATG12/5 conjugate also negatively regulates the innate antiviral immune response by blocking the type I IFN production pathway through direct association with RARRES3 and MAVS. Also plays a role in translation or delivery of incoming viral RNA to the translation apparatus. Plays a critical role in multiple aspects of lymphocyte development and is essential for both B and T lymphocyte survival and proliferation. Required for optimal processing and presentation of antigens for MHC II. Involved in the maintenance of axon morphology and membrane structures, as well as in normal adipocyte differentiation. Promotes primary ciliogenesis through removal of OFD1 from centriolar satellites and degradation of IFT20 via the autophagic pathway. [UniProt]

Application Notes

Titration of the ATG5 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 1-30 from the human protein was used as the immunogen for this ATG5 antibody.

Storage

Aliquot the ATG5 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.