Product Name: **ATG5 Mouse Monoclonal Antibody**
Catalog #: **AMM81461**
For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB,ICC,ELISA,FC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG2a
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Purified antibody in PBS with 0.05% sodium azide
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:2000,ICC 1:200-1:1000,ELISA 1:5000-1:20000,FC 1:200-1:400
Molecular Weight	32.4kDa

Antigen Information

Gene Name	ATG5
Alternative Names	ASP; APG5; APG5L; hAPG5; APG5-LIKE
Gene ID	9474.0
SwissProt ID	Q9H1Y0
Immunogen	Synthesized peptide of human ATG5 (AA: MTDDKDVLRDVWFGRIc).

Background

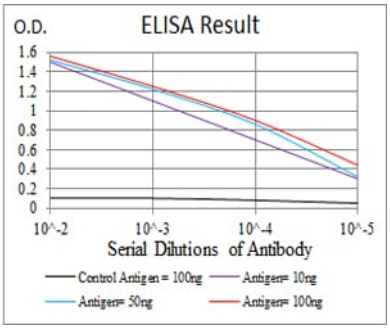
ATG5 involved in autophagic vesicle formation. Conjugation with ATG12, through a ubiquitin-like conjugatingsystem involving ATG7 as an E1-like activating enzyme and ATG10 as an E2-like conjugating enzyme, is essentialfor its function. The ATG12-ATG5 conjugate acts as an E3-like enzyme which is required for lipidation of ATG8family proteins and their association to the

vesicle membranes. Involved in mitochondrial quality control afteroxidative damage, and in subsequent cellular longevity. The ATG12-ATG5 conjugate also negatively regulates theinnate antiviral immune response by blocking the type I IFN production pathway through direct association withRARRES3 and MAVS. Also plays a role in translation or delivery of incoming viral RNA to the translationapparatus. Plays a critical role in multiple aspects of lymphocyte development and is essential for both B and Tlymphocyte 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 adipocytedifferentiation. Promotes primary ciliogenesis through removal of OFD1 from centriolar satellites and degradationof IFT20 via the autophagic pathway

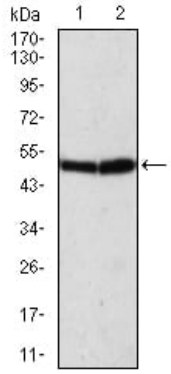
Research Area

Autophagy,Apoptosis

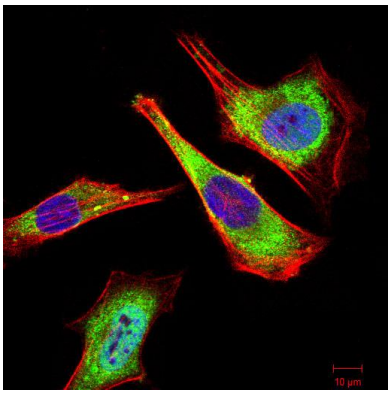
Image Data



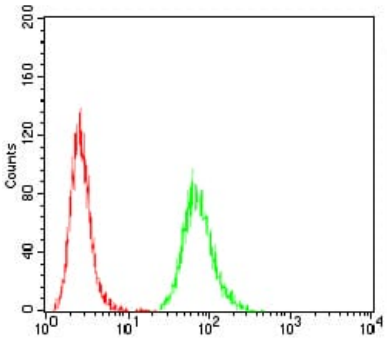
Black line: Control Antigen (100 ng); Purple line: Antigen(10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng);



Western blot analysis using ATG5 mouse mAb against Hela (1) and K562 (2) cell lysate.



Immunofluorescence analysis of Hela cells using ATG5 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin.



Flow cytometric analysis of Hela cells using ATG5 mouse mAb (green) and negative control (red).