

Basic Information

Product Name	Anti-ATG5 Antibody	
Gene Name	ATG5	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human APG5L, identical to the related mouse sequence, and different from the related rat sequence by one amino acid.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	50-55 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200

Storage

12 months from date of receipt, -20°C as supplied.

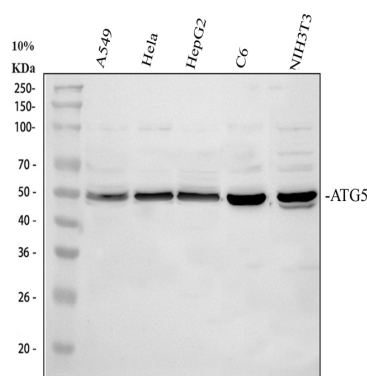
Background Information

Autophagy protein 5 is a protein that in humans is encoded by the ATG5 gene. It is also known as APG5 or ASP, and this gene is mapped to 6q21. It is found that knockdown of ATG5 in hepatocytes increased triglyceride levels with oleate or a second endogenous stimulus for triglyceride formation. These hepatocytes with ATG5 knockdown also had increased lipid droplet number and size. ATG5 is an E3 ubiquitin ligase which is necessary for autophagy due to its role in autophagosome elongation. It is activated by ATG7 and forms a complex with ATG12 and ATG16L1. This complex is necessary for LC3-1 conjugation to PE to form LC3-II.

Reference

Anti-ATG5 Antibody被引用在12文献中。

Selected Validation Data



Western blot analysis of ATG5 using anti-ATG5 antibody (BA3525-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human A549 whole cell lysates,

Lane 2: human HeLa whole cell lysates,

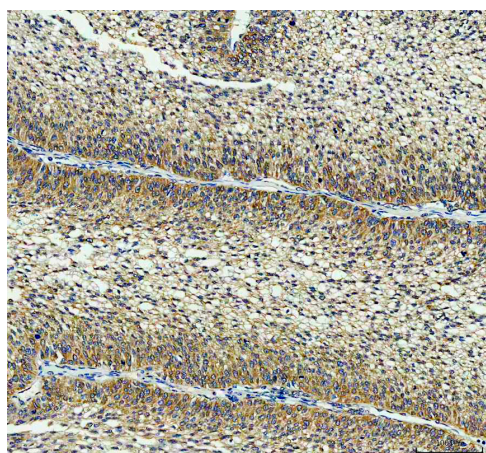
Lane 3: human HepG2 whole cell lysates,

Lane 4: rat C6 whole cell lysates,

Lane 5: mouse NIH/3T3 whole cell lysates.

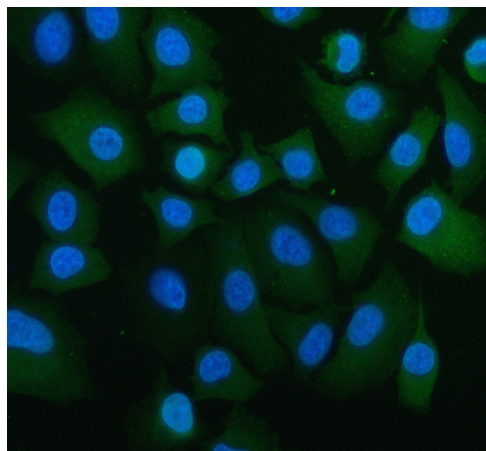
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-ATG5 antigen A03957-Aen affinity purified polyclonal antibody (BA3525-2) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for ATG5 at approximately 50-55 kDa. The expected band size for ATG5 is at 32 kDa.

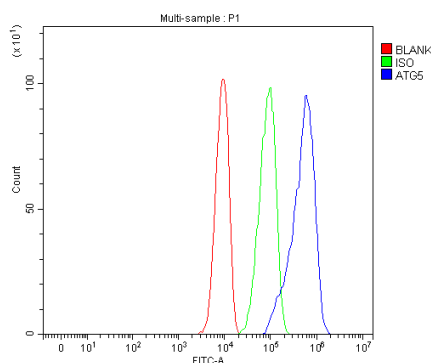


IHC analysis of ATG5 using anti-ATG5 antibody (BA3525-2).

ATG5 was detected in a paraffin-embedded section of human ovarian cancer tissue. The tissue section was incubated with rabbit anti-ATG5 Antibody (BA3525-2) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of ATG5 using anti-ATG5 antibody (BA3525-2). ATG5 was detected in an immunocytochemical section of A549 cells. The section was incubated with rabbit anti-ATG5 Antibody (BA3525-2) at a dilution of 1:100. Fluoro488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of HepG2 cells using anti-ATG5 antibody (BA3525-2).

Overlay histogram showing HepG2 cells stained with BA3525-2 (Blue line). To facilitate intrMyelin basic protein/MBPIllular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-ATG5 Antibody (BA3525-2) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.