

ATG5 Antibody

Catalog # ASM10501

Specification

ATG5 Antibody - Product Information

Application ICC/IF, WB
Primary Accession [Q9H1Y0](#)
Other Accession [NP_001273035.1](#)
Host Rabbit
Reactivity Human
Clonality Polyclonal
Description
 Rabbit Anti-Human ATG5 Polyclonal

Target/Specificity

Predicted molecular weight at ~32.4kDa.
 Observed molecular weights at ~48-60kDa
 based on ATG12-ATG5 heterodimer.

Other Names

APG5-like Antibody, ASP Antibody, hAPG5 Antibody

Immunogen

Synthetic peptide from the N-terminal of human ATG5

Purification

Peptide Affinity Purified

Storage -20°C

Storage Buffer

PBS, 50% glycerol, 0.09% sodium azide

Shipping Blue Ice or 4°C
Temperature

Certificate of Analysis

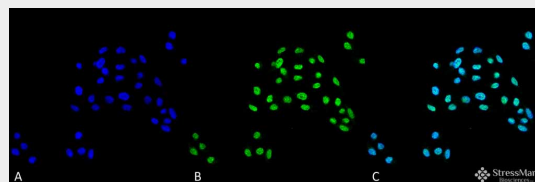
A 1:1000 dilution of SPC-612 was sufficient
 for detection of ATG5 on HeLa cell lysates
 using Goat anti-rabbit IgG:HRP as the
 secondary antibody.

Cellular Localization

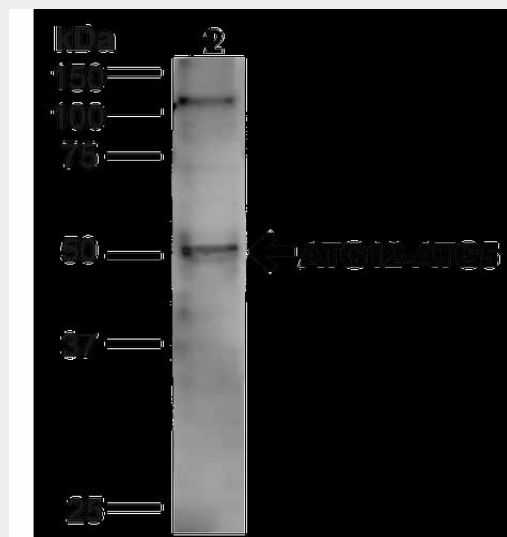
Cytoplasm

ATG5 Antibody - Protocols

Provided below are standard protocols that you
 may find useful for product applications.



Immunocytochemistry/Immunofluorescence
 analysis using Rabbit Anti-ATG5 Polyclonal
 Antibody (ASM10501). Tissue: Cervical
 Cancer cell line (HeLa). Species: Human.
 Fixation: 4% Formaldehyde for 15 min at RT.
 Primary Antibody: Rabbit Anti-ATG5
 Polyclonal Antibody (ASM10501) at 1:100 for
 60 min at RT. Secondary Antibody: Goat
 Anti-Rabbit ATTO 488 at 1:100 for 60 min at
 RT. Counterstain: DAPI (blue) nuclear stain at
 1:5000 for 5 min RT. Localization: Nucleus.
 Magnification: 40X. (A) DAPI (blue) nuclear
 stain (B) Phalloidin Texas Red F-Actin stain
 (C) ATG5 Antibody (D) Composite.



Western blot analysis of Human HeLa cell
 lysates showing detection of ~32.4kDa ATG5
 protein using Rabbit Anti-ATG5 Polyclonal
 Antibody (ASM10501). Lane 1: MW Ladder.
 Lane 2: Human HeLa (20 µg). Load: 20 µg.
 Block: 5% milk + TBST for 1 hour at RT.
 Primary Antibody: Rabbit Anti-ATG5
 Polyclonal Antibody (ASM10501) at 1:1000
 for 1 hour at RT. Secondary Antibody: Goat

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Rabbit: HRP at 1:2000 for 1 hour at RT.
Color Development: TMB solution for 12 min
at RT. Predicted/Observed Size: ~32.4kDa.
Other Band(s): ~105kDa.

ATG5 Antibody - Background

ATG5 is required for autophagy. It conjugates to ATG12 and associates with isolation membrane to form autophagosomes. The conjugate detaches from the membrane immediately before or after autophagosome formation is completed (1). Conjugation to ATG12 is essential for autophagy, but is not required for association with isolation membrane. ATG5 also plays an important role in the apoptotic process. Its expression is a relatively late event in the apoptotic process, occurring downstream of caspase activity. ATG5 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 (2).

ATG5 Antibody - References

1. Pyo J.O., et al. (2005) J Biol Chem. 280(21): 20722-20729.
2. Mizushima N., et al. (2003) Mol Biol Cell. 15(3): 1101-1111.