10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.622.0609

ATG5 Antibody
Catalog # ASM10500

Specification

ATG5 Antibody - Product Information

Application	ICC/IF, WB
Primary Accession	Q9H1Y0
Other Accession	NP_001273035.1
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	FITC

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 mid-protein of human ATG5

Purification
Peptide Affinity Purified

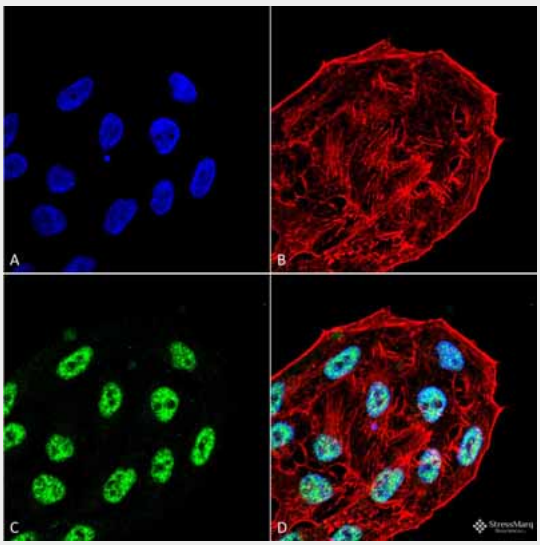
Storage	-20ºC

Storage Buffer
PBS, 50% glycerol, 0.09% sodium azide

Shipping Temperature	Blue Ice or 4ºC

Certificate of Analysis
A 1:1000 dilution of SPC-611 was sufficient for detection of ATG5 on HeLa cell lysates using Goat anti-rabbit IgG:HRP as the secondary antibody.

Cellular Localization
Cytoplasm



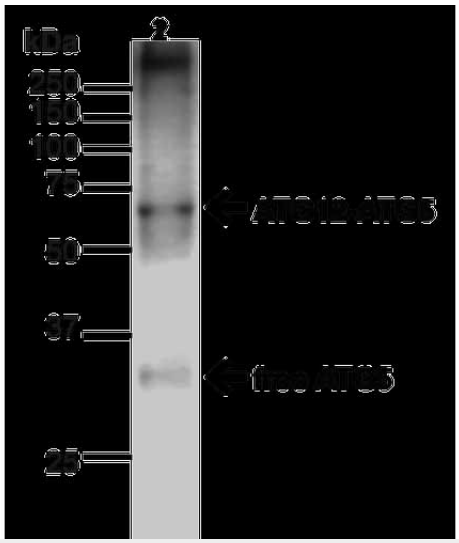
Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-ATG5 Polyclonal Antibody (ASM10500). Tissue: Cervical Cancer cell line (HeLa). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Rabbit Anti-ATG5 Polyclonal Antibody (ASM10500) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Rabbit ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60min RT, 5min RT. Localization: Nucleus, Cytoplasm. Magnification: 40X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) ATG5 Antibody (D) Composite.

ATG5 Antibody - Protocols

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

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.622.0609

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture



Western blot analysis of Human HeLa cell lysates showing detection of ~15kDa ATG5 protein using Rabbit Anti-ATG5 Polyclonal Antibody (ASM10500). 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 (ASM10500) at 1:1000 for 1 hour at RT. Secondary Antibody: Goat Anti-Rabbit: HRP at 1:2000 for 1 hour at RT. Color Development: TMB solution for 12 min at RT. Predicted/Observed Size: ~15kDa. Other Band(s): ATG12-ATG5 Complex.

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.