

## **ATG5 Antibody**

Catalog # ASM10501

## **Specification**

## **ATG5 Antibody - Product Information**

Application ICC/IF, WB Primary Accession O9H1YO

Other Accession NP\_001273035.1

Host Rabbit
Reactivity Human
Clonality Polyclonal
Format APC

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

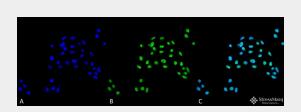
**Certificate of Analysis** 

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.

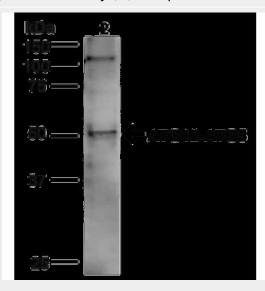
**Cellular Localization** Cytoplasm

# **ATG5 Antibody - Protocols**

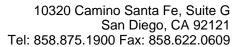
Provided below are standard protocols that you may find useful for product applications.



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  $\sim\!32.4\text{kDa}$  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
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- 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:  $\sim$ 32.4kDa. Other Band(s):  $\sim$ 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.