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ATG5 Antibody
Catalog # ASC10852

Specification

ATG5 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	A9UGY9
Other Accession	EAW48415, 119568800
Reactivity	**Human, Mouse, Rat**
Host	**Chicken**
Clonality	**Polyclonal**
Isotype	**IgY**
Application Notes	**ATG5 antibody can be used for the detection of ATG5 by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL.**

ATG5 Antibody - Additional Information

Gene ID **9474**

Target/Specificity
ATG5; Three isoforms of ATG5 are known to exist; this ATG5 antibody will only detect the longest isoform.

Reconstitution & Storage
ATG5 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
ATG5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ATG5 Antibody - Protein Information

ATG5 Antibody - Protocols

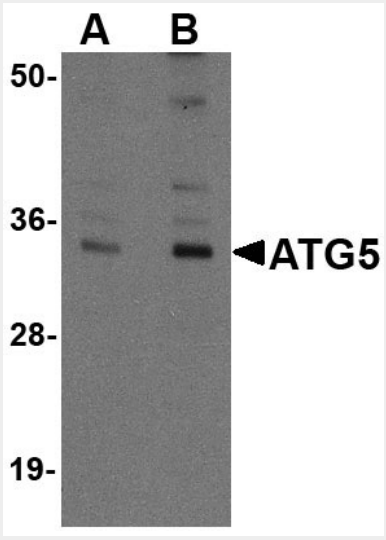
Provided below are standard protocols that you may find useful for product applications.

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

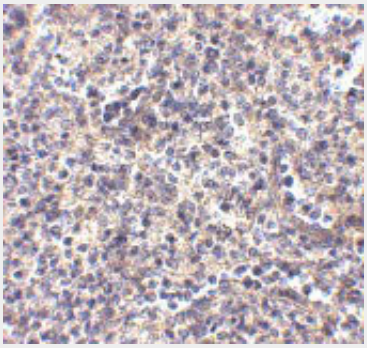
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- Cell Culture

ATG5 Antibody - Images



Western blot analysis of ATG5 in mouse spleen tissue lysate with ATG5 antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of ATG5 in human spleen tissue with ATG5 antibody at 2.5 µg/mL.

ATG5 Antibody - Background

ATG5 Antibody: Autophagy, the process of bulk degradation of cellular proteins through an autophagosomic-lysosomal pathway is important for normal growth control and may be defective in tumor cells. It is involved in the preservation of cellular nutrients under starvation conditions as well as the normal turnover of cytosolic components. This process is negatively regulated by TOR (Target of rapamycin) through phosphorylation of autophagy protein APG1. ATG5, another member of the autophagy protein family, forms a conjugate with ATG12; this conjugate has a ubiquitin-protein ligase (E3)-like activity for protein lipidation in autophagy. This conjugate also associates with innate immune response proteins such as RIG-I and VISA (also known as IPS-1), inhibiting type I interferon production and permitting viral replication in host cells.

ATG5 Antibody - References

Gozuacik D and Kimchi A. Autophagy as a cell death and tumor suppressor mechanism. Oncogene. 2004; 23:2891-906.
Kisen GO, Tessitore L, Costelli P, et al. Reduced autophagic activity in primary rat hepatocellular carcinoma and ascites hepatoma cells. Carcinogenesis1993; 14:2501-5.
Kamada Y, Funakoshi T, Shintani T, et al. Tor-mediated induction of autophagy via Apg1 protein

kinase complex. J. Cell. Biol.2000; 150:1507-13.
Hanada T, Noda NN, Satomi Y, et al. The Atg12-Atg5 conjugate has a novel E3-like activity for protein lipidation in autophagy. J. Biol. Chem.2007; 282:37298-302.