

Anti-Autophagy protein 5 ATG5 Antibody

Catalog Number: A00240

About ATG5

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.

Overview

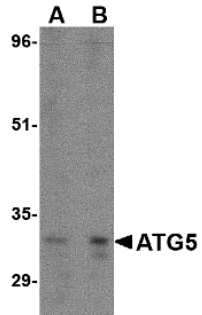
Product Name	Anti-Autophagy protein 5 ATG5 Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Autophagy protein 5 ATG5 Antibody (Catalog # A00240). Tested in ELISA, WB, IHC-P, IF applications. This antibody reacts with Human, Mouse, Rat.
Application	ELISA, IF, IHC-P, WB
Clonality	Polyclonal
Formulation	ATG5 Antibody is supplied in PBS containing 0.02% sodium azide.
Storage Instructions	ATG5 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. Avoid repeated freeze-thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Host	Rabbit
Uniprot ID	A9UGY9

Technical Details

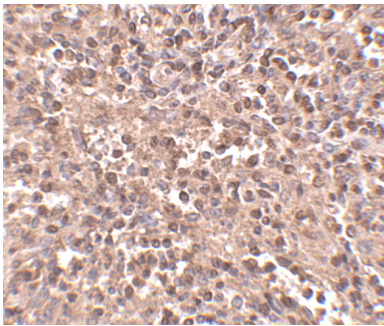
Immunogen	ATG5 antibody was raised against a 16 amino acid synthetic peptide from near the amino terminus of human ATG5. The immunogen is located within the first 50 amino acids of ATG5.
Predicted Reactive Species	Bovine, Pig
Cross Reactivity	Three isoforms of ATG5 are known to exist; this ATG5 antibody will only detect the longest isoform.
Isotype	IgG
Form	Liquid
Concentration	1 mg/mL

Purification	ATG5 Antibody is affinity chromatography purified via peptide column.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: ATG5 antibody can be used for the detection of ATG5 by Western blot at 1 - 2 ug/mL. Antibody can also be used for immunohistochemistry starting at 2.5 ug/mL. For immunofluorescence start at 5 ug/mL. Antibody validated: Western Blot in rat samples; Immunohistochemistry in human samples and Immunofluorescence in human samples. All other applications and species not yet tested. Optimal dilutions for each application should be determined by the researcher.

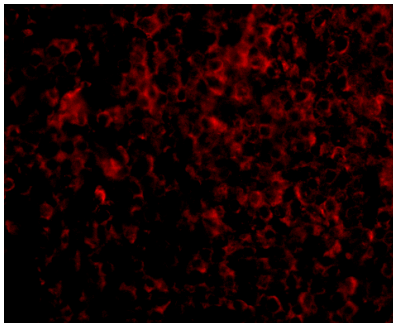
Anti-Autophagy protein 5 ATG5 Antibody (A00240) Images



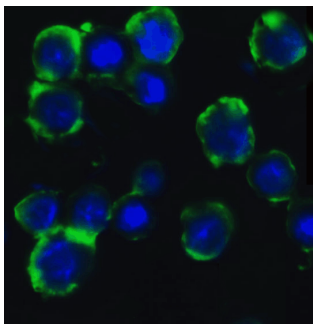
Western blot analysis of ATG5 in rat spleen tissue lysate with ATG5 antibody at (A) 1 and (B) 2 ug/mL.



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



Immunofluorescence of ATG5 in Human Spleen cells with ATG5 antibody at 20 ug/mL.



Immunofluorescence of ATG5 in HeLa cells with ATG5 Antibody at 5 ug/ml.

1 Publications Citing This Product

1. PubMed ID: -, Shen W, Jia N, Miao J, Chen S, Zhou S, Meng P, Zhou X, Tang L, Zhou L: Penicillium B Protects against Cisplatin-Induced Renal Tubular Cell Apoptosis through Activation of AMPK-Induced Autophagy and Mitochondrial Biogenesis. Kidney Dis 2021. doi:10.1159/000514657

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