

Anti-ATG5/Apg5 Rabbit Monoclonal Antibody

Catalog Number: M00240

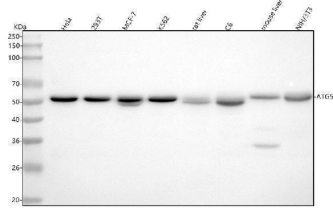
Overview

Product Name	Anti-ATG5/Apg5 Rabbit Monoclonal Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-ATG5/Apg5 Rabbit Monoclonal Antibody catalog # M00240. Tested in WB, IHC, ICC/IF, IP applications. This antibody reacts with Human, Mouse, Rat.
Application	IP, IF, IHC, ICC, WB
Clonality	Monoclonal GCD-1
Formulation	Rabbit IgG in stabilizing components, phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q9H1Y0

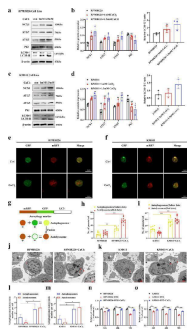
Technical Details

Immunogen	A synthesized peptide derived from human ATG5
Isotype	Rabbit IgG
Form	Liquid
Concentration	0.5mg/ml
Purification	Affinity-chromatography
Suggested Dilutions	WB 1:500-2000 IHC 1:50-200 ICC/IF 1:50-200 IP 1:20

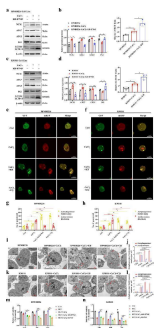
Anti-ATG5/Apg5 Rabbit Monoclonal Antibody (M00240) Images



Western blot analysis of ATG5/Apg5 using anti-ATG5/Apg5 antibody (M00240). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates, Lane 2: human 293T whole cell lysates, Lane 3: human MCF-7 whole cell lysates, Lane 4: human K562 whole cell lysates, Lane 5: rat liver tissue lysates, Lane 6: rat C6 whole cell lysates, Lane 7: mouse liver tissue lysates, Lane 8: mouse NIH/3T3 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-ATG5/Apg5 antigen affinity purified monoclonal antibody (Catalog # M00240) at 1:1000 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for ATG5/Apg5 at approximately 55 kDa. The expected band size for ATG5/Apg5 is at 32 kDa.

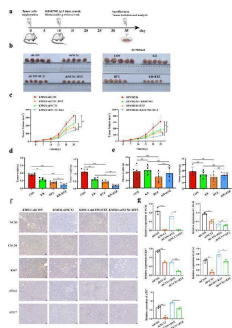


High extracellular calcium ($[Ca^{2+}]_o$) promotes autophagic flux. a, c RPMI8226 cells and KMS11 cells were treated with or without $CaCl_2$ (1mM and 1.5mM) for 48h, followed by Western Blot to determine NCX1, ATG7, ATG5, P62 and LC3B-II/I levels under each condition, and summary data (b, d) (* p)

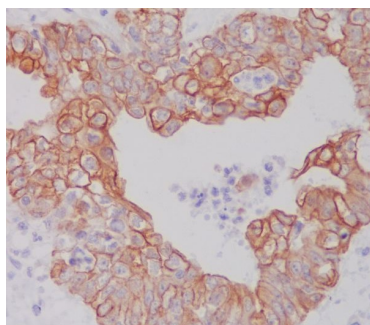


Inhibition of NCX1 reverses the high $[Ca^{2+}]_o$ induced increase in autophagic flux in MM cells. a, b RPMI8226 and KMS11 cells were treated with 1.5mM $CaCl_2$ in combination with or without KB-R7943 for 48h. NCX1 protein and autophagic marker proteins (ATG7, ATG5, P62 and LC3B-II/I) were detected by western blot, and summary data (b, d) (* p)

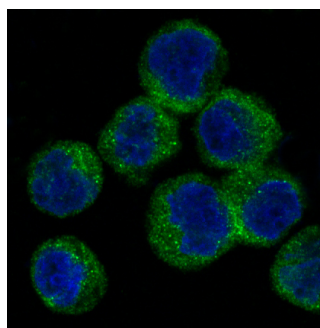
NCX1 inhibition sensitizes MM cells to bortezomib in xenograft mouse models. a RPMI8226 and KMS11 cells (1×10^7) were subcutaneously injected into the right groin of NCG mice, and 10 days later were treated with intraperitoneal bortezomib injections (0.5 mg/kg), twice a week, and



intraperitoneal KB-R7943 injections (5 mg/kg) three times a week. On day 35 following MM cell inoculation, mice were sacrificed and tumors were assessed for MM burden. b Photographic images of resected tumor from all the mice in each group. c Changes in tumor volume. Tumor diameters were measured with calipers once a week (5 mice per group), and tumor volumes were estimated using the following formula $v = \pi/6 * L * W * H$, where "L", "W" and "H" are the longest diameter, shortest diameter and height of the tumor respectively. Data are presented as the mean \pm SD from 5 mice (* p



Immunohistochemical analysis of paraffin-embedded human ovarian cancer, using ATG5 Antibody.



Immunofluorescent analysis of Raji cells, using ATG5 Antibody.

3 Publications Citing This Product

1. PubMed ID: -, Gang Zhong, Huiping Long, Shiting Ma, Yao Shunhan, Jia Li, Jun Yao, miRNA-335-5p relieves chondrocyte inflammation by activating autophagy in osteoarthritis, Life Sciences, Volume 226, 2019, Pages 164-172, ISSN 0024-3205, <https://doi.org/10.1016/j.lfs.2019.03.071>.
2. PubMed ID: 26459718, Anti-autophagic and anti-apoptotic effects of memantine in a SH-SY5Y cell model of Alzheimer's disease via mammalian target of rapamycin-dependent and -independent pathways
3. PubMed ID: 27383629, Nrf2 signalling and autophagy are involved in diabetes mellitus-induced defects in the development of mouse placenta

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