

Basic Information

Product Name	Anti-ATG7 Antibody
Gene Name	ATG7
Source	Rabbit
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB
Contents	500 ug/ml antibody with PBS , 0.02% Na ₂ S ₂ O ₃ , 1 mg BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Apg7 (673-703aa HSFLEDLTGLTLLHQETQAAEIWDMSDDETI), different from the related mouse and rat sequences by two amino acids.
concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	78KD
Dilution Ratios	Western blot(WB):1:500-2000

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

Autophagy-related protein 7 is a protein that in humans is encoded by the ATG7 gene. It is mapped to 3p25.3. This gene was identified based on homology to Pichia pastoris GSA7 and Saccharomyces cerevisiae APG7. In the yeast, the protein appears to be required for fusion of peroxisomal and vacuolar membranes. The protein also shows homology to the ATP-binding and catalytic sites of the E1 ubiquitin activating enzymes. ATG7 is essential for the Apg12 conjugation system that mediates membrane fusion in autophagy. It is found that when nutrients are limited, ATG7 can regulate p53-dependent cell cycle and cell death pathways.

Reference

Anti-ATG7 Antibody被引用在1文献中。

Selected Validation Data

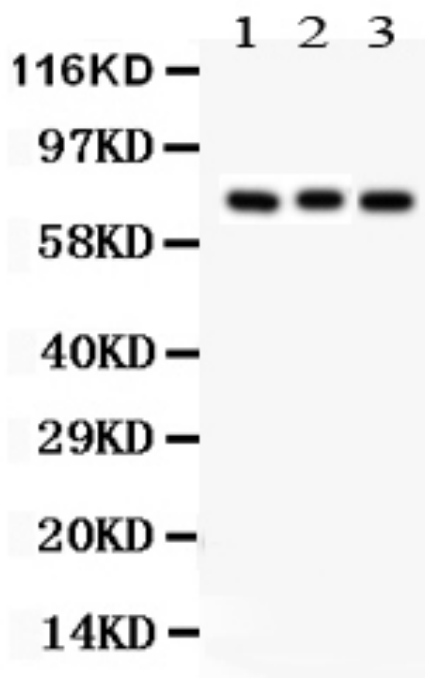


Figure 1. Western blot analysis of APG7 using anti-APG7 antibody (PB0495). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: Rat Brain Tissue Lysate, Lane 2: Mouse Brain Tissue Lysate, Lane 3: 293T Whole Cell Lysate. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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-APG7 antigen affinity purified polyclonal antibody (Catalog # PB0495) at 0.5 μ g/mL 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 1:10000 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 APG7 at approximately 78KD. The expected band size for APG7 is at 78KD.