

Basic Information

Product Name	Anti-ATG7 Antibody (Clone#ACHA-1)
Gene Name	ATG7
Source	Rabbit
Clonality	Monoclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, ICC/IF
Contents	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide, 0.4-0.5 mg/ml BSA and 50% glycerol.
Immunogen	A synthesized peptide derived from human Atg7 (Apg7) Formation of the autophagosome involves a ubiquitin-like conjugation system in which Atg12 is covalently bound to Atg5 and targeted to autophagosome vesicles. This conjugation reaction is mediated by the ubiquitin E1-like enzyme Atg7 and the E2-like enzyme Atg10.
Concentration	500 ug/ml
Purification	Affinity-chromatography
Observed MW	78 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Immunocytochemistry/Immunofluorescence (ICC/IF):1:50-200

Storage

12 months from date of receipt, -20°C as supplied.

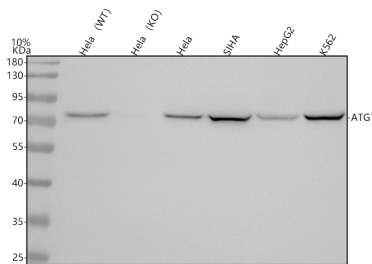
Background Information

Autophagy related 7 is a protein in humans encoded by ATG7 gene. It is mapped to 3p25.3. This gene encodes an E1-like activating enzyme that is essential for autophagy and cytoplasmic to vacuole transport. The encoded protein is also thought to modulate p53-dependent cell cycle pathways during prolonged metabolic stress. It has been associated with multiple functions, including axon membrane trafficking, axonal homeostasis, mitophagy, adipose differentiation, and hematopoietic stem cell maintenance. Alternative splicing results in multiple transcript variants.

Reference

Anti-ATG7 Antibody (Clone#ACHA-1)被引用在1文献中。

Selected Validation Data



Western blot analysis of anti-ATG7 antibody (BM5322). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela- WT whole cell lysates,

Lane 2: human Hela-ATG7 KO whole cell lysates.

Lane 3: human Hela whole cell lysates,

Lane 4: human SiHa whole cell lysates,

Lane 5: human HepG2 whole cell lysates,

Lane 6: human K562 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-ATG7 antigen

affinity purified monoclonal antibody (BM5322) at a dilution of

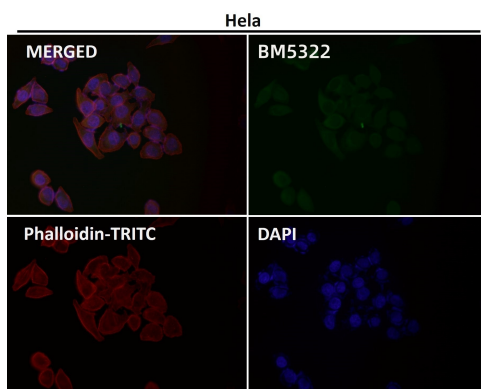
1:1000 and probed with a goat anti-rabbit IgG-HRP secondary

antibody (Catalog # BA1054). The signal is developed using ECL Plus

Western Blotting Substrate (Catalog # AR1197). A specific band was

detected for ATG7 at approximately 78 kDa. The expected band size

for ATG7 is at 78 kDa.



Immunofluorescent analysis using the Antibody.