

Basic Information

Product Name	Anti-ATG4A Antibody (Clone#ACHB-1)
Gene Name	ATG4A
Source	Rabbit
Clonality	Monoclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, IHC, IP
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 Atg4A The cysteine protease Atg4 is pivotal to autophagosome membrane generation and regulation. Atg4 primes the Atg8 homologue for lipidation by cleaving its carboxy terminus and exposing its glycine residue for E1-like enzyme Atg7. The Atg8 homologue is transferred to the E2-like enzyme Atg3 before forming the Atg8-PE conjugate. During later stages of autophagy, Atg4 can reverse this lipidation event by cleaving PE, thereby recycling the Atg8 homologue.
Concentration	500 ug/ml
Purification	Affinity-chromatography
Observed MW	45 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC):1:50-200 ImmunoPrecipitation (IP): 1:20

Storage

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

Background Information

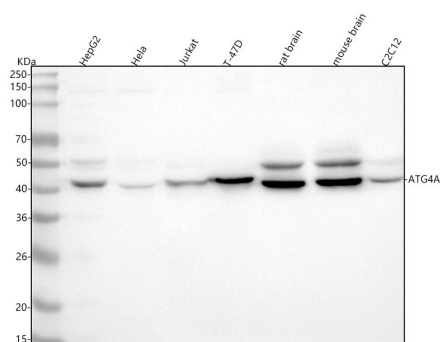
Cysteine protease ATG4A is an enzyme that in humans is encoded by the ATG4A gene. It is mapped to Xq22.3. Autophagy is the process by which endogenous proteins and damaged organelles are destroyed intracellularly. Autophagy is postulated to be essential for cell homeostasis and cell remodeling during differentiation, metamorphosis, non-apoptotic cell death, and aging. Reduced levels of autophagy have been described in some malignant tumors, and

a role for autophagy in controlling the unregulated cell growth linked to cancer has been proposed. This gene encodes a member of the autophagin protein family. The encoded protein is also designated as a member of the C-54 family of cysteine proteases.

Reference

Anti-ATG4A Antibody (Clone#ACHB-1)被引用在1文献中。

Selected Validation Data



Western blot analysis of anti-ATG4A antibody (BM5323). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HepG2 whole cell lysates,

Lane 2: human Hela whole cell lysates,

Lane 3: human Jurkat whole cell lysates,

Lane 4: human T-47D whole cell lysates,

Lane 5: rat brain tissue lysates,

Lane 6: mouse brain tissue lysates,

Lane 7: mouse C2C12 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-ATG4A antigen

affinity purified monoclonal antibody (BM5323) 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 ATG4A at approximately 45 kDa. The expected band

size for ATG4A is at 45 kDa.