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ATG10 Antibody

Catalog # ASC10613

Product Information

Application	WB, E
Primary Accession	Q9H0Y0
Other Accession	EAW95884, 119616290
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	25279
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	ATG10 antibody can be used for the detection of ATG10 by Western blot at 0.5 - 2 □g/mL.

Additional Information

Gene ID	83734
Other Names	Ubiquitin-like-conjugating enzyme ATG10, 6.3.2.-, Autophagy-related protein 10, APG10-like, ATG10, APG10L
Target/Specificity	ATG10;
Reconstitution & Storage	ATG10 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	ATG10 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ATG10
Synonyms	APG10L
Function	E2-like enzyme involved in autophagy. Acts as an E2-like enzyme that catalyzes the conjugation of ATG12 to ATG5. ATG12 conjugation to ATG5 is required for autophagy. Likely serves as an ATG5-recognition molecule. Not involved in ATG12 conjugation to ATG3 (By similarity). Plays a role in adenovirus-mediated cell lysis.
Cellular Location	Cytoplasm.

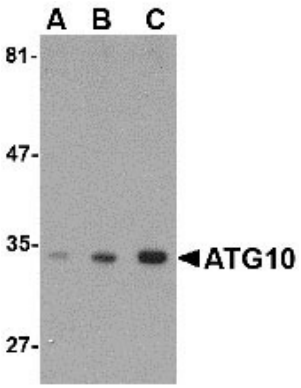
Background

ATG10 Antibody: 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. Another member of the autophagy protein family is ATG10, an E2-like enzyme involved in two ubiquitin-like modifications essential for autophagosome formation: ATG12-ATG5 conjugation and the modification of a soluble form of MAP-LC3, a homolog of yeast Apg8, to a membrane-bound form. ATG10 has also been shown to interact with ATG12 in human embryonic kidney cells in the presence of ATG7. Multiple isoforms of ATG10 are known to exist.

References

Gozuacik D and Kimchi A. Autophagy as a cell death and tumor suppressor mechanism. Oncogene2004; 23:2891-906.
Kisen GO, Tessitore L, Costelli P, et al. Reduced autophagic activity in primary rat hepatocellular carcinoma and ascites hepatoma cells. Carcinogenesis1993; 14:2501-5.
Kamada Y, Funakoshi T, Shintani T, et al. Tor-mediated induction of autophagy via Apg1 protein kinase complex. J. Cell. Biol.2000; 150:1507-13.
Nemoto T, Tanida I, Tanida-Miyake E, et al. The mouse APG10 homologue, an E2-like enzyme for APG12p conjugation, facilitates MAP-LC3 modification. J. Biol. Chem.2003; 278:39517-26.

Images



Western blot analysis of ATG10 in SK-N-SH cell lysate with ATG10 antibody at (A) 0.5, (B) 1 and (C) 2 µg/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.