

Atg4b (231CT21.1.7): sc-517310

BACKGROUND

Autophagy, a process that results in the lysosomal-dependent degradation of cytosolic compartments, is carried out by the autophagosome, which is a double-membrane vesicle whose formation is catalyzed by several autophagy-related gene (Atg) proteins. Atg4b (ATG4 autophagy related 4 homolog B), also known as APG4B, AUTL1 or KIAA0943, is a 393 amino acid protein that localizes to the cytoplasm and belongs to the peptidase C54 family. Expressed in heart, pancreas, brain, liver and skeletal muscle, Atg4b functions as a cysteine protease that cleaves the C-terminal part of target proteins, such as GABARAP and MAP1LC3, and plays an essential role in autophagy. Atg4b exists as multiple alternatively spliced isoforms and is functionally inhibited by N-ethylmaleimide.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ATG4B (human) mapping to 2q37.3.

SOURCE

Atg4b (231CT21.1.7) is a mouse monoclonal antibody raised against a recombinant protein corresponding to Atg4b of human origin.

PRODUCT

Each vial contains 100 µg IgM in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Atg4b (231CT21.1.7) is recommended for detection of Atg4b of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

Suitable for use as control antibody for Atg4b siRNA (h): sc-72584, Atg4b shRNA Plasmid (h): sc-72584-SH and Atg4b shRNA (h) Lentiviral Particles: sc-72584-V.

Molecular Weight of Atg4b isoforms 1/2/3/4/5: 44/53/31/37/43 kDa.

SELECT PRODUCT CITATIONS

- Wang, Z., et al. 2019. Profiling of apoptosis- and autophagy-associated molecules in human lung cancer A549 cells in response to cisplatin treatment using stable isotope labeling with amino acids in cell culture. *Int. J. Oncol.* 54: 1071-1085.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.