

Atg10 (M-16): sc-70123

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. Atg10 (autophagy-related gene 10), also known as PP12616 or APG10L, is a 220 amino acid protein that localizes to the cytoplasm and plays a role in autophagy, specifically functioning as an E2-like enzyme that provides Atg recognition sites during autophagosome synthesis. Atg10 exists as two isoforms which are produced as a result of alternative splicing events. The gene encoding Atg10 maps to human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm or of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

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CHROMOSOMAL LOCATION

Genetic locus: ATG10 (human) mapping to 5q14.2; Atg10 (mouse) mapping to 13 C3.

RESEARCH USE

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

SOURCE

Atg10 (M-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Atg10 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-70123 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

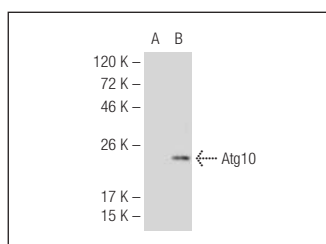
Atg10 (M-16) is recommended for detection of Atg10 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Atg10 siRNA (h): sc-72576, Atg10 siRNA (m): sc-72577, Atg10 shRNA Plasmid (h): sc-72576-SH, Atg10 shRNA Plasmid (m): sc-72577-SH, Atg10 shRNA (h) Lentiviral Particles: sc-72576-V and Atg10 shRNA (m) Lentiviral Particles: sc-72577-V.

Molecular Weight of Atg10: 24 kDa.

Positive Controls: Atg10 (m): 293T Lysate: sc-118605.

DATA



Atg10 (M-16): sc-70123. Western blot analysis of Atg10 expression in non-transfected: sc-117752 (A) and mouse Atg10 transfected: sc-118605 (B) 293T whole cell lysates.

STORAGE

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

PROTOCOLS

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