

# Atg10 (Q-18): sc-70125

## 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.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: ATG10 (human) mapping to 5q14.1; Atg10 (mouse) mapping to 13 C3.

## SOURCE

Atg10 (Q-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Atg10 of mouse origin.

## RESEARCH USE

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

## 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-70125 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Atg10 (Q-18) 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), 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).

Atg10 (Q-18) is also recommended for detection of Atg10 in additional species, including canine, bovine and avian.

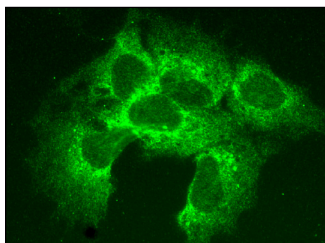
Suitable for use as control antibody for Atg10 siRNA (h): sc-72576, Atg10 siRNA (m): sc-72577, Atg10 shRNA Plasmid (h): sc-72576-SH, Atg10 shRNA Plasmid (m): sc-72577-SH, Atg10 shRNA (h) Lentiviral Particles: sc-72576-V and Atg10 shRNA (m) Lentiviral Particles: sc-72577-V.

Molecular Weight of Atg10: 24 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



Atg10 (Q-18): sc-70125. Immunofluorescence staining of formalin-fixed HepG2 cells showing cytoplasmic localization.

## STORAGE

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