**BACKGROUND**

BECN1 (Beclin 1) is a coiled-coil protein that has been implicated as an inhibitor of tumorigenesis. BECN1, which associates with Bcl-2, plays a significant role in autophagy. Autophagy is the degradation of cellular proteins in the lysosomes, and when this pathway is suppressed, cell growth is deregulated. Autophagy is controlled by the same signal transduction pathway that induces the phosphorylation of the ribosomal protein S6, and both are mediated via amino acids. BECN1 expression in various carcinoma cell lines, such as MCF7, is low, whereas it is ubiquitously expressed in normal breast tissue. In transfected MCF7 cells, BECN1 complements autophagy-tosis and, subsequently, inhibits cellular proliferation. Additionally, BECN1 shares structural similarity to the yeast autophagy gene product, Apg6, and was one of the first mammalian proteins discovered to mediate autophagy.

**CHROMOSOMAL LOCATION**

Genetic locus: BECN1 (human) mapping to 17q21.31; Becn1 (mouse) mapping to 11 D.

**SOURCE**

BECN1 (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of BECN1 of human origin.

**PRODUCT**

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

**APPLICATIONS**

BECN1 (H-300) is recommended for detection of BECN1 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

BECN1 (H-300) is also recommended for detection of BECN1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for BECN1 siRNA (h): sc-29797, BECN1 siRNA (m): sc-29798, BECN1 shRNA Plasmid (h): sc-29797-SH, BECN1 shRNA Plasmid (m): sc-29798-SH, BECN1 shRNA (h) Lentiviral Particles: sc-29797-V and BECN1 shRNA (m) Lentiviral Particles: sc-29798-V.

Molecular Weight of BECN1: 60 kDa.

Positive Controls: BECN1 (h): 293T Lysate: sc-125053, MCF7 whole cell lysate: sc-2206 or NIH/3T3 whole cell lysate: sc-2210.

**RESEARCH USE**

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

**STORAGE**

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

**DATA**

**SELECT PRODUCT CITATIONS**


**MONOS Satisfaction Guaranteed**

Try BECN1 (E-8): sc-48341 or BECN1 (G-11): sc-48381, our highly recommended monoclonal alternatives to BECN1 (H-300). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see BECN1 (E-8): sc-48341.

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Santa Cruz Biotechnology, Inc.  1.800.457.3801  831.457.3800  fax 831.457.3801  Europe +00800 4573 8000  49 6221 4503 0  www.scbt.com