SANTA CRUZ BIOTECHNOLOGY, INC.

Bcl-G (C-17): sc-83375

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Apoptosis is defined as a set of cascades which, when initiated, program the cell to undergo lethal changes, such as membrane blebbing, mitochondrial breakdown and DNA fragmentation. Bcl-2 is one of many key regulators of apoptosis that are essential for proper development, tissue homeostasis and protection against foreign pathogens. Bcl-G, also known as BCL2L14 (BCL2-like 14) or BCLG, is a 327 amino acid cytoplasmic protein that belongs to the Bcl-2 family of apoptosis-regulating proteins. Bcl-G is expressed as three alternatively spliced transcripts, designated short, medium and long. The short isoform is testis-specific and localizes to cytosolic organelles, while the long isoform is widely expressed and is distributed throughout the cytosol. Overexpression of Bcl-G induces apoptosis in cells, suggesting a possible role for Bcl-G in tumor suppression.

REFERENCES

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6. Yoo, N.J., Soung, Y.H., Lee, S.H., Jeong, E.G. and Lee, S.H. 2007. Mutational analysis of the BH3 domains of proapoptotic Bcl-2 family genes Bad, Bmf and Bcl-G in laryngeal squamous cell carcinomas. Tumori 93: 195-197.

CHROMOSOMAL LOCATION

Genetic locus: BCL2L14 (human) mapping to 12p13.2; Bcl2l14 (mouse) mapping to 6 G1.

SOURCE

Bcl-G (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Bcl-G 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.

Blocking peptide available for competition studies, sc-83375 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Bcl-G (C-17) is recommended for detection of Bcl-G 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); non cross-reactive with other Bcl family members.

Bcl-G (C-17) is also recommended for detection of Bcl-G in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Bcl-G siRNA (h): sc-72631, Bcl-G siRNA (m): sc-72632, Bcl-G shRNA Plasmid (h): sc-72631-SH, Bcl-G shRNA Plasmid (m): sc-72632-SH, Bcl-G shRNA (h) Lentiviral Particles: sc-72631-V and Bcl-G shRNA (m) Lentiviral Particles: sc-72632-V.

Molecular Weight of Bcl-G : 30 kDa.

Positive Controls: A549 cell lysate: sc-2413.

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.

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 or our catalog for detailed protocols and support products.