SANTA CRUZ BIOTECHNOLOGY, INC.

Bcl-G (QQ2): sc-101218

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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5. Soung, Y.H., Lee, J.W., Park, W.S., Nam, S.W., Lee, J.Y., Yoo, N.J. and Lee, S.H. 2006. BH3 domain mutation of proapoptotic genes Bad, Bmf and Bcl-G is rare in transitional cell carcinomas of the urinary bladder. Pathology 38: 33-34.
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.

SOURCE

Bcl-G (QQ2) is a mouse monoclonal antibody raised against recombinant Bcl-G of human origin.

PRODUCT

Each vial contains 100 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

Bcl-G (QQ2) is recommended for detection of Bcl-G of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

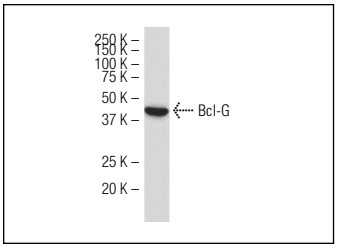
Molecular Weight of Bcl-G: 37 kDa.

Positive Controls: A549 cell lysate: sc-2413.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



Bcl-G (QQ2): sc-101218. Western blot analysis of Bcl-G expression in A549 whole cell lysate.

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.