SANTA CRUZ BIOTECHNOLOGY, INC.

Bcl-w (H-139): sc-11422

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The Bcl-2 family of proteins is characterized by its ability to modulate cell death (apoptosis) under a broad range of physiological conditions. Bcl-2, A1 and Bcl-xL function to inhibit apoptosis while other members of the Bcl-2 family, Bax, Bad, Bak and Bcl-x_S oppose their death-suppressing effects. Using a PCR-based strategy, an additional protein with life-promoting activity, designated Bcl-w, has been identified. The protein is highly conserved between mouse and human and is encoded by a gene located near the TCRα gene on chromosome 14. Bcl-w is expressed in myeloid cell lines but not in T and B lymphocytes, and can be found in a wide range of tissues. An alternative splicing event in exon 4 results in two transcripts. The first, Bcl-w, encodes a protein of 193 amino acids, and the second, Bcl-w/rox, encodes a protein 333 amino acids in length. The "rox" portion of Bcl-w/rox shows a striking 66% amino acid sequence identity with the *Drosophila* rox2 protein; however, the Bcl-w/rox transcript may be expressed at very low levels.

REFERENCES

1. Yang, E., et al. 1995. Bad, a heterodimeric partner for Bcl-x_L and Bcl-2, displaces Bax and promotes cell death. Cell 80: 285-291.
2. Craig, R.W., 1995. The Bcl-2 gene family. Semin. Cancer Biol. 6: 35-43.

CHROMOSOMAL LOCATION

Genetic locus: BCL2L2 (human) mapping to 14q11.2; Bcl2l2 (mouse) mapping to 14 C3.

SOURCE

Bcl-w (H-139) is a rabbit polyclonal antibody raised against amino acids 55-193 mapping at the C-terminus of Bcl-w 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

Bcl-w (H-139) is recommended for detection of Bcl-w 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).

Bcl-w (H-139) is also recommended for detection of Bcl-w in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Bcl-w siRNA (h): sc-37293, Bcl-w siRNA (m): sc-37294, Bcl-w shRNA Plasmid (h): sc-37293-SH, Bcl-w shRNA Plasmid (m): sc-37294-SH, Bcl-w shRNA (h) Lentiviral Particles: sc-37293-V and Bcl-w shRNA (m) Lentiviral Particles: sc-37294-V.

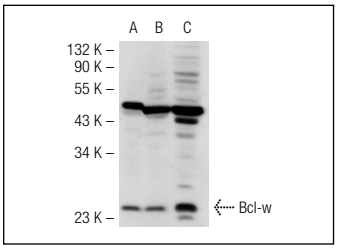
Molecular Weight of Bcl-w: 22 kDa.

Positive Controls: Bcl-w (m): 293T Lysate: sc-118788, NIH/3T3 whole cell lysate: sc-2210 or HL-60 whole cell lysate: sc-2209.

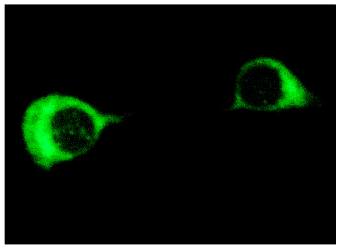
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Bcl-w (H-139): sc-11422. Western blot analysis of Bcl-w expression in non-transfected 293T: sc-117752 (**A**), mouse Bcl-w transfected 293T: sc-118788 (**B**) and NIH/3T3 (**C**) whole cell lysates.



Bcl-w (H-139): sc-11422. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Uittenbogaard, M. and Chiaramello, A. 2005. The basic helix-loop-helix transcription factor Nex-1/Math-2 promotes neuronal survival of PC12 cells by modulating the dynamic expression of anti-apoptotic and cell cycle regulators. J. Neurochem. 92: 585-596.

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.