

Bcl-w (G-21): sc-130701

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-x_L 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 TCR α 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.

CHROMOSOMAL LOCATION

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

SOURCE

Bcl-w (G-21) is a purified rabbit polyclonal antibody raised against a sequence mapping near the N-terminus of Bcl-w of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml 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.

RESEARCH USE

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

APPLICATIONS

Bcl-w (G-21) is recommended for detection of Bcl-w BH3 domain of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

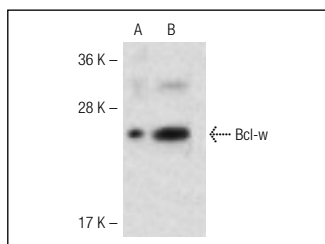
Molecular Weight of Bcl-w: 22 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, human Bcl-w transfected 293 whole cell lysate or HL-60 whole cell lysate: sc-2209.

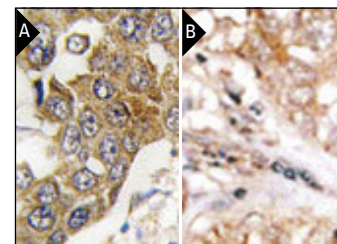
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Bcl-w (G-21): sc-130701. Western blot analysis of Bcl-w expression in non-transfected (A) and human Bcl-w transfected (B) 293 whole cell lysates.



Bcl-w (G-21): sc-130701. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast carcinoma tissue (A) and hepatocarcinoma (B) showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

- Wong, C., et al. 2012. Direct visualization of Bcl-2 family protein interactions using live cell fluorescent protein redistribution assays. *Cell Death Dis.* 3: e288.
- Gong, J., et al. 2013. MicroRNA-125b promotes apoptosis by regulating the expression of Mcl-1, Bcl-w and IL-6R. *Oncogene* 32: 3071-3079.
- García-Cano, J., et al. 2015. Exploiting the potential of autophagy in cisplatin therapy: A new strategy to overcome resistance. *Oncotarget* 6: 15551-15565.
- Cui, Y.H., et al. 2016. Regulation of apoptosis by miR-122 in pterygium via targeting Bcl-w. *Invest. Ophthalmol. Vis. Sci.* 57: 3723-3730.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **Bcl-w (2E4): sc-293236**, our highly recommended monoclonal alternative to Bcl-w (G-21).