

## Bcl-w (N-19): sc-6172

### 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<sub>L</sub> function to inhibit apoptosis while other members of the Bcl-2 family, Bax, Bad, Bak and Bcl-x<sub>S</sub> 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 $\alpha$  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<sub>L</sub> 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 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Bcl-w of human origin.

### PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-6172 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

Bcl-w (N-19) 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), 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 (N-19) is also recommended for detection of Bcl-w in additional species, including equine, canine, bovine and porcine.

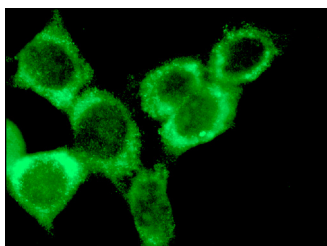
Suitable for use as control antibody for Bcl-w siRNA (h): sc-37293, Bcl-w siRNA (m): sc-37294, Bcl-w shRNA Plasmid (h): sc-37293-SH, Bcl-w shRNA Plasmid (m): sc-37294-SH, Bcl-w shRNA (h) Lentiviral Particles: sc-37293-V and Bcl-w shRNA (m) Lentiviral Particles: sc-37294-V.

Molecular Weight of Bcl-w: 22 kDa.

### 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

### DATA



Bcl-w (N-19): sc-6172. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing cytoplasmic localization.

### SELECT PRODUCT CITATIONS

1. Korhonen, L., et al. 2003. Increase in Bcl-2 phosphorylation and reduced levels of BH3-only Bcl-2 family proteins in kainic acid-mediated neuronal death in the rat brain. *Eur. J. Neurosci.* 18: 1121-1134.
2. Hsu, S.H., et al. 2004. Dysfunctional spermatogenesis in transgenic mice overexpressing bHLH-ZIP transcription factor, SPZ1. *Exp. Cell Res.* 294: 185-198.
3. Hoelzinger, D.B., et al. 2005. Gene expression profile of glioblastoma multi-forme invasive phenotype points to new therapeutic targets. *Neoplasia* 7: 7-16.

### 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.

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Satisfaction  
Guaranteed

Try **Bcl-w (2E4): sc-293236**, our highly recommended monoclonal alternative to Bcl-w (N-19).