Bcl-2 (100): sc-509

**BACKGROUND**
Bcl-2 is one among many key regulators of apoptosis, which are essential for proper development, tissue homeostasis, and protection against foreign pathogens. Human Bcl-2 is an anti-apoptotic, membrane-associated oncoprotein that can promote cell survival through protein-protein interactions with other Bcl-2 related family members, such as the death suppressors Bcl-xL, Mcl-1, Bcl-w, and A1 or the death agonists Bak, Bak, Bik, Bad, and Bid. The antiapoptotic function of Bcl-2 can also be regulated through pro-teolytic processing and phospho-rylation. Bcl-2 may promote cell survival by interfering with the activation of the cytochrome c/Apaf-1 pathway through stabilization of the mitochondrial membrane. Mutations in the Bcl-2 gene can contribute to cancers where normal physiological cell death mechanisms are compromised by deregulation of the anti-apoptotic influence of Bcl-2.

**CHROMOSOMAL LOCATION**
Genetic locus: BCL2 (human) mapping to 18q21.33.

**SOURCE**
Bcl-2 (100) is a mouse monoclonal antibody raised against a synthetic peptide corresponding to amino acids 41-54 of human Bcl-2.

**PRODUCT**
Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin. Bcl-2 (100) is available conjugated to agarose (sc-509 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-509 HRP), 200 µg/ml, for WB, IHC(P) and FCM. In addition, Bcl-2 (100) is available conjugated to either TRITC (sc-509 TRITC, 200 µg/ml), PerCP (sc-509 PerCP), PerCP-Cy5.5 (sc-509 PCPC5) or Alexa Fluor® 488 (sc-509 AF488) or Alexa Fluor® 647 (sc-509 AF647), 200 µg/ml, for IF, IHC(P) and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

**APPLICATIONS**
Bcl-2 (100) is recommended for detection of Bcl-2 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), 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 flow cytometry (1 µg per 1 x 10^6 cells).

Suitable for use as control antibody for Bcl-2 siRNA (h): sc-29214, Bcl-2 shRNA Plasmid (h): sc-29214-SH and Bcl-2 shRNA (h) Lentiviral Particles: sc-29214-V.

Molecular Weight of Bcl-2: 26 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, Jurkat whole cell lysate: sc-2204 or Bcl-2 (h): 293T Lysate: sc-176463.

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

**DATA**
Western blot analysis of Bcl-2 expression in HL-60 (A), Jurkat (B), and WEHI-231 (C) whole cell lysates. Antibodies tested include Bcl-2 (C-2): sc-7382 (A, B, C) and Bcl-2 (100): sc-509 (D). Bcl-2 (100): sc-509. Immunofluorescence staining of methanol-fixed HL-60 cells showing cytoplasmic staining (A). Immunoperoxidase staining of formalin-fixed, paraffin-embedded human appendix tissue showing cytoplasmic staining of glandular cells and lymphoid cells (B).

**SELECT PRODUCT CITATIONS**

**RESEARCH USE**
For research use only, not for use in diagnostic procedures.