**BACKGROUND**

The Bcl-2 gene was isolated at the chromosomal breakpoint of t bearing follicular B cell lymphomas. Bcl-2 blocks cell death following a variety of stimuli and confers a death-sparing effect to certain hematopoietic cell lines following growth factor withdrawal. A second protein, designated Bcl-associated X protein (Bax) p21, has extensive amino acid homology with Bcl-2 and both homodimerizes and heterodimerizes with Bcl-2. Overexpression of Bax accelerates apoptotic death induced by cytokine deprivation in an IL-3-dependent cell line, and Bax also counteracts the death repressor activity of Bcl-2. Bcl-x, one of several additional proteins with sequence homology to Bcl-2, is expressed as Bcl-xL, a 233 amino acid protein with 43% sequence identity with Bcl-2 that suppresses cell death, and Bcl-xS, a shorter variant that is 178 amino acids in length and lacks a 63 amino acid region (amino acids 126-188) found in Bcl-xL and which functions as a dominant inhibitor of Bcl-2. A further apoptosis-inducing protein, Bad, dimersizes both with Bcl-xL and to a lesser extent with Bcl-2, thus displacing Bax and inducing apoptosis.

**CHROMOSOMAL LOCATION**

Genetic locus: BCL2L1 (human) mapping to 20q11.21; Bcl2l1 (mouse) mapping to 17q12.1.

**SOURCE**

Bcl-xL (H-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 165-190 at the C-terminus of Bcl-xL/H of human origin.

**PRODUCT**

Each vial contains 200 µg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Bcl-xL (H-5) is available conjugated to agarose (sc-8392 AC), 500 µg/0.25 ml. Bcl-xL (H-5) is also available conjugated to agarose (sc-8392 AC), 500 µg/0.25 ml, for Western Blotting (starting dilution 1:50, 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), flow cytometry (1 µg per 1 x 10^6 cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with Bcl-xL.

Suitable for use as control antibody for Bcl-xL siRNA (h): sc-43630, Bcl-xL siRNA (m): sc-44602, Bcl-xL siRNA (r): sc-270538, Bcl-xL shRNA Plasmid (h): sc-43630-SH, Bcl-xL shRNA Plasmid (m): sc-44602-SH, Bcl-xL shRNA Plasmid (r): sc-270538-SH, Bcl-xL shRNA (h) Lentiviral Particles: sc-43630-V, Bcl-xL shRNA (m) Lentiviral Particles: sc-44602-V and Bcl-xL shRNA (r) Lentiviral Particles: sc-270538-V.

Molecular Weight of Bcl-xL: 30 kDa.

Positive Controls: NAMALWA cell lysate: sc-2234, NIH/3T3 whole cell lysate: sc-2210 or C2C12 whole cell lysate: sc-364188.

**DATA**

The Bcl-xL (H-5) is recommended for detection of Bcl-xL 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 µg per 1 x 10^6 cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with Bcl-xL.

**APPLICATIONS**

Bcl-xL (H-5) is recommended for detection of Bcl-xL 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 µg per 1 x 10^6 cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with Bcl-xL.

**STORAGE**

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

**PROTOCOLS**

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

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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