# SANTA CRUZ BIOTECHNOLOGY, INC.

# Bax (B-9): sc-7480



#### BACKGROUND

The Bcl-2 gene was isolated at the chromosomal breakpoint of  $\tau$ -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. Bcl-2 is localized to outer mitochondrial membranes and endoplasmic reticulum as well as nuclear membranes. A related protein, designated Bax p21 (for Bcl-associated X protein), has extensive amino acid homology with Bcl-2 and both homodimerizes and forms heterodimers with Bcl-2. Overexpression of Bax accelerates apoptotic death induced by cytokine deprivation in an IL-3 dependent cell line, and Bax also counters the death repressor activity of Bcl-2.

#### **CHROMOSOMAL LOCATION**

Genetic locus: BAX (human) mapping to 19q13.33; Bax (mouse) mapping to 7 B4.

#### SOURCE

Bax (B-9) is a mouse monoclonal antibody raised against amino acids 1-171 of  $Bax\alpha$  of mouse origin.

### PRODUCT

Each vial contains 200  $\mu g$  IgG\_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Bax (B-9) is available conjugated to agarose (sc-7480 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to either phycoerythrin (sc-7480 PE), fluorescein (sc-7480 FITC), Alexa Fluor<sup>®</sup> 488 (sc-7480 AF488), Alexa Fluor<sup>®</sup> 546 (sc-7480 AF546), Alexa Fluor<sup>®</sup> 594 (sc-7480 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-7480 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-7480 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-7480 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, Bax (B-9) is available conjugated to either TRITC (sc-7480 TRITC, 200  $\mu$ g/ml) or Alexa Fluor<sup>®</sup> 405 (sc-7480 AF405, 200  $\mu$ g/ml), 100 tests in 2 ml, for IF, IHC(P) and FCM.

### **APPLICATIONS**

Bax (B-9) is recommended for detection of Bax $\alpha$  and Bax $\beta$  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) and flow cytometry (1 µg per 1 x 10<sup>6</sup> cells).

Suitable for use as control antibody for Bax siRNA (h): sc-29212, Bax siRNA (m): sc-29213, Bax shRNA Plasmid (h): sc-29212-SH, Bax shRNA Plasmid (m): sc-29213-SH, Bax shRNA (h) Lentiviral Particles: sc-29212-V and Bax shRNA (m) Lentiviral Particles: sc-29213-V.

Molecular Weight of Bax: 23 kDa.

Positive Controls: Raji whole cell lysate: sc-364236, NAMALWA cell lysate: sc-2234 or Jurkat whole cell lysate: sc-2204.

### STORAGE

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

## DATA





Bax (B-9): sc-7480. Western blot analysis of Bax expression in Jurkat (A), Raji (B), NAMALWA (C), MM-142 (D) and RAW 264.7 (E) whole cell lysates.

Bax (B-9): sc-7480. Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing cytoplasmic staining of cells in red pulp (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human salivary gland tissue showing cytoplasmic staining of glandular cells (B).

### **SELECT PRODUCT CITATIONS**

- Dhanabal, M., et al. 1999. Endostain induces endothelial cell apoptosis. J. Biol. Chem. 274: 11721-11726.
- Shi, X., et al. 2016. TLR2/NFκB signalling regulates endogenous IL-6 release from marrow-derived mesenchymal stromal cells to suppress the apoptosis of PC12 cells injured by oxygen and glucose deprivation. Mol. Med. Rep. 13: 5358-5364.
- Di Cesare, E., et al. 2017. Mitotic cell death induction by targeting the mitotic spindle with Tubulin-inhibitory indole derivative molecules. Oncotarget 8: 19738-19759.
- Abuyassin, B., et al. 2018. Intermittent hypoxia causes histological kidney damage and increases growth factor expression in a mouse model of obstructive sleep apnea. PLoS ONE 13: e0192084.
- Zhang, C., et al. 2019. Effects of miR-103a-3p on the autophagy and apoptosis of cardiomyocytes by regulating Atg5. Int. J. Mol. Med. 43: 1951-1960.
- Jin, B.R. and An, H.J. 2020. Baicalin alleviates benign prostate hyperplasia through androgen-dependent apoptosis. Aging 12: 2142-2155.
- 7. Shao, X., et al. 2021. Siomycin A induces reactive oxygen species-mediated cytotoxicity in ovarian cancer cells. Oncol. Lett. 21: 431.
- B. Gao, X.X., et al. 2022. Gestational cholestasis induced intrauterine growth restriction through triggering IRE1α-mediated apoptosis of placental trophoblast cells. FASEB J. 36: e22388.
- Wang, X., et al. 2023. Targeting KRAS-mutant stomach/colorectal tumors by disrupting the ERK2-p53 complex. Cell Rep. 42: 111972.

#### **RESEARCH USE**

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

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