

# Bax (SPM336): sc-65532

## 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 (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.

## REFERENCES

1. Bakhshi, A., et al. 1985. Cloning the chromosomal breakpoint of t(14;18) human lymphomas: clustering around JH on chromosome 14 and near a transcriptional unit on 18. *Cell* 41: 899-906.
2. Vaux, D.L., et al. 1988. Bcl-2 promotes the survival of haemopoietic cells and cooperates with c-Myc to immortalize pre-B cells. *Nature* 335: 440-442.
3. Chen-Lavy, Z., et al. 1989. The Bcl-2 candidate proto-oncogene product is a 24-kilodalton integral-membrane protein highly expressed in lymphoid cell lines and lymphomas carrying the t(14;18). *Mol. Cell. Biol.* 9: 701-710.

## CHROMOSOMAL LOCATION

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

## SOURCE

Bax (SPM336) is a mouse monoclonal antibody raised against a synthetic peptide corresponding to amino acids 3-16 of Bax of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Bax (SPM336) is recommended for detection of Bax of mouse, rat, human and primate origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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 flow cytometry (1  $\mu$ g 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.

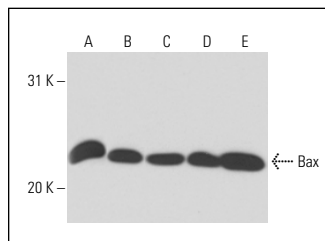
Molecular Weight of Bax: 23 kDa.

Positive Controls: BJAB whole cell lysate: sc-2207, MDA-MB-231 cell lysate: sc-2232 or Ramos cell lysate: sc-2216.

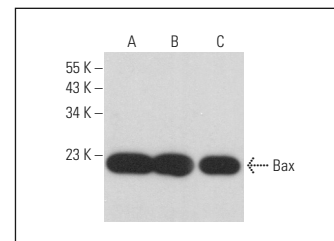
## STORAGE

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

## DATA



Bax (SPM336): sc-65532. Western blot analysis of Bax expression in SW480 (A), HuT 78 (B), Ramos (C), BJAB (D) and MDA-MB-231 (E) whole cell lysates.



Bax (SPM336): sc-65532. Western blot analysis of Bax expression in Ramos (A), Raji (B) and OVCAR-3 (C) whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Gravina, G.L., et al. 2010. 5-azacitidine restores and amplifies the bicalutamide response on preclinical models of androgen receptor expressing or deficient prostate tumors. *Prostate* 70: 1166-1178.
2. Driák, D., et al. 2011. Changes in expression of some apoptotic markers in different types of human endometrium. *Folia Biol.* 57: 104-111.
3. Liu, Y., et al. 2013. miR-375 targets the p53 gene to regulate cellular response to ionizing radiation and etoposide in gastric cancer cells. *DNA Repair* 12: 741-750.
4. Paul, A., et al. 2013. Cytotoxicity and apoptotic signalling cascade induced by chelidonine-loaded PLGA nanoparticles in Hep G2 cells *in vitro* and bioavailability of nano-chelidonine in mice *in vivo*. *Toxicol. Lett.* 222: 10-22.
5. Suo, H., et al. 2015. Induction of apoptosis in HCT-116 colon cancer cells by polysaccharide of *Larimichthys crocea* swim bladder. *Oncol. Lett.* 9: 972-978.
6. Xu, H., et al. 2017. AXIN1 protects against testicular germ cell tumors via the PI3K/Akt/mTOR signaling pathway. *Oncol. Lett.* 14: 981-986.
7. Liang, H., et al. 2018. MicroRNA-10a inhibits A30P  $\alpha$ -synuclein aggregation and toxicity by targeting proapoptotic protein BCL2L1. *Int. J. Clin. Exp. Pathol.* 11: 624-633.
8. Feng, Y., et al. 2022. Protective role of wogonin following traumatic brain injury by reducing oxidative stress and apoptosis via the PI3K/Nrf2/HO-1 pathway. *Int. J. Mol. Med.* 49: 53.

## RESEARCH USE

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



See **Bax (B-9): sc-7480** for Bax antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor<sup>®</sup> 488, 546, 594, 647, 680 and 790.