

# Bax (6A7): sc-23959

## 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. 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 (6A7) is a mouse monoclonal antibody raised against the N-terminal residues 12-24 common to human, mouse and rat Bax protein.

## PRODUCT

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

Bax (6A7) is available conjugated to agarose (sc-23959 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-23959 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-23959 PE), fluorescein (sc-23959 FITC), Alexa Fluor<sup>®</sup> 488 (sc-23959 AF488), Alexa Fluor<sup>®</sup> 546 (sc-23959 AF546), Alexa Fluor<sup>®</sup> 594 (sc-23959 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-23959 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-23959 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-23959 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## APPLICATIONS

Bax (6A7) is recommended for detection of Bax 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) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

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, Ramos cell lysate: sc-2216 or MDA-MB-231 cell lysate: sc-2232.

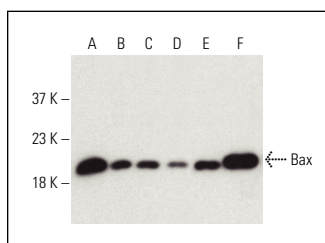
## STORAGE

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

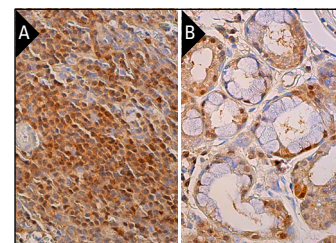
## RESEARCH USE

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

## DATA



Bax (6A7): sc-23959. Western blot analysis of Bax expression in HT-1080 (A), BJAB (B), Ramos (C), MDA-MB-231 (D), MCF7 (E) and RAW 264.7 (F) whole cell lysates. Detection reagent used: m-IgG Fc BP-HRP: sc-525409.



Bax (6A7): sc-23959. Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing cytoplasmic and nuclear staining of cells in white pulp and cells in red pulp (A) and human salivary gland tissue showing cytoplasmic and nuclear staining of glandular cells (B).

## SELECT PRODUCT CITATIONS

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- Gong, A., et al. 2013. Autophagy contributes to ING4-induced glioma cell death. *Exp. Cell Res.* 319: 1714-1723.
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- Wang, L., et al. 2016. Inhibitory effect of  $\alpha$ -solanine on esophageal carcinoma *in vitro*. *Exp. Ther. Med.* 12: 1525-1530.
- Reyna, D.E., et al. 2017. Direct activation of Bax by BTSA1 overcomes apoptosis resistance in acute myeloid leukemia. *Cancer Cell* 32: 490-505.
- Vanaja, K.G., et al. 2018. A Loss of epigenetic control can promote cell death through reversing the balance of pathways in a signaling network. *Mol. Cell* 72: 60-70.
- Zhang, Z., et al. 2019. MicroRNA-296 inhibits colorectal cancer cell growth and enhances apoptosis by targeting ARRB1-mediated AKT activation. *Oncol. Rep.* 41: 619-629.
- Ibrahim, S.A., et al. 2020. Cancer-associated V-ATPase induces delayed apoptosis of protumorigenic neutrophils. *Mol. Oncol.* 14: 590-610.
- Spitz, A.Z., et al. 2021. Eltrombopag directly inhibits Bax and prevents cell death. *Nat. Commun.* 12: 1134.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

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