

Bax (4H32): sc-70407

BACKGROUND

The Bcl-2 gene was isolated at the chromosomal breakpoint of τ -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.

CHROMOSOMAL LOCATION

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

SOURCE

Bax (4H32) 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 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Bax (4H32) 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) and immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)].

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: CCRF-CEM cell lysate: sc-2225, HuT 78 whole cell lysate: sc-2208 or HeLa whole cell lysate: sc-2200.

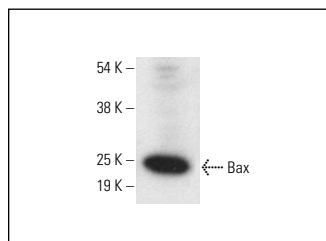
STORAGE

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

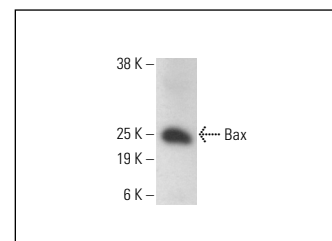
RESEARCH USE

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

DATA



Bax (4H32): sc-70407. Western blot analysis of Bax expression in NIH/3T3 whole cell lysate. Detection reagent used: m-IgG Fc BP-HRP: sc-525409.



Bax (4H32): sc-70407. Western blot analysis of Bax expression in Hep G2 whole cell lysate. Detection reagent used: m-IgG Fc BP-HRP: sc-525409.

SELECT PRODUCT CITATIONS

1. Sa, G., et al. 2009. GD3, an overexpressed tumor-derived ganglioside, mediates the apoptosis of activated but not resting T cells. *Cancer Res.* 69: 3095-3104.
2. Li, X., et al. 2009. Inhibitor of growth 4 induces growth suppression and apoptosis in glioma U87MG. *Pathobiology* 76: 181-192.
3. Roudkenar, M.H., et al. 2009. Lipocalin 2 regulation by thermal stresses: protective role of Lcn2/NGAL against cold and heat stresses. *Exp. Cell Res.* 315: 3140-3151.
4. Sebag, S.C., et al. 2018. Inhibition of the mitochondrial calcium uniporter prevents IL-13 and allergen-mediated airway epithelial apoptosis and loss of barrier function. *Exp. Cell Res.* 362: 400-411.
5. Li, M.L., et al. 2018. Chloroquine potentiates the anticancer effect of sunitinib on renal cell carcinoma by inhibiting autophagy and inducing apoptosis. *Oncol. Lett.* 15: 2839-2846.
6. Wei, F., et al. 2019. miR-593 inhibits proliferation and invasion and promotes apoptosis in non-small cell lung cancer cells by targeting SLUG-associated signaling pathways. *Mol. Med. Rep.* 20: 5172-5182.
7. Huang, Z., et al. 2020. miR-133 inhibits proliferation and promotes apoptosis by targeting LASP1 in lupus nephritis. *Exp. Mol. Pathol.* 114: 104384.
8. Wu, D., et al. 2021. The effect of lipocalin-2 (LCN2) on apoptosis: a proteomics analysis study in an LCN2 deficient mouse model. *BMC Genomics* 22: 892.

PROTOCOLS

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



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