

Bax (6D149): sc-70405

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 (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 (6D149) 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 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Bax (6D149) is available conjugated to agarose (sc-70405 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; and to phycoerythrin (sc-70405 PE), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM.

APPLICATIONS

Bax (6D149) 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ 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: NAMALWA cell lysate: sc-2234, Raji whole cell lysate: sc-364236 or HT-1080 whole cell lysate: sc-364183.

RESEARCH USE

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

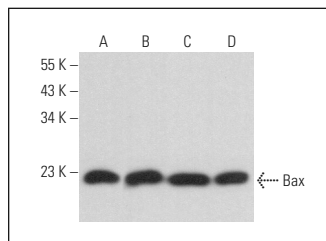
PROTOCOLS

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

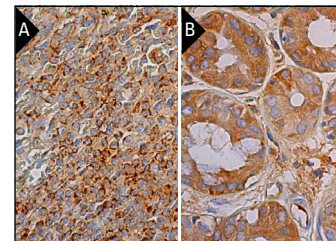
STORAGE

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

DATA



Bax (6D149): sc-70405. Western blot analysis of Bax expression in Raji (A), HT-1080 (B), NAMALWA (C) and GA-10 (D) whole cell lysates.



Bax (6D149): sc-70405. Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing cytoplasmic staining of cells in white pulp and 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

- Wang, Y., et al. 2011. Inhibition of Stat3 reverses alkylator resistance through modulation of the Akt and β -catenin signaling pathways. *Oncol. Rep.* 26: 1173-1180.
- Bai, L., et al. 2014. BM-1197: a novel and specific Bcl-2/Bcl-x_L inhibitor inducing complete and long-lasting tumor regression *in vivo*. *PLoS ONE* 9: e99404.
- Li, B., et al. 2016. 20(S)-protopanaxadiol saponins inhibit SKOV3 cell migration. *Oncol. Lett.* 11: 1693-1698.
- Lee, S., et al. 2017. Analysis of resistance-associated gene expression in docetaxel-resistant prostate cancer cells. *Oncol. Lett.* 14: 3011-3018.
- Jiang, Y., et al. 2018. Overexpression of miR-130a-3p/301a-3p attenuates high glucose-induced MPC5 podocyte dysfunction through suppression of TNF- α signaling. *Exp. Ther. Med.* 15: 1021-1028.
- Mohammadi, A.B., et al. 2019. Sericin alleviates restraint stress induced depressive- and anxiety-like behaviors via modulation of oxidative stress, neuroinflammation and apoptosis in the prefrontal cortex and hippocampus. *Brain Res.* 1715: 47-56.
- Ghazizadeh, J., et al. 2020. *Melissa officinalis* L. hydro-alcoholic extract inhibits anxiety and depression through prevention of central oxidative stress and apoptosis. *Exp. Physiol.* 105: 707-720.
- Sefidgari-Abrahi, S., et al. 2021. From the gut to the heart: *L. plantarum* and inulin administration as a novel approach to control cardiac apoptosis via 5-HT2B and TrkB receptors in diabetes. *Clin. Nutr.* 40: 190-201.

CONJUGATES

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.