SANTA CRUZ BIOTECHNOLOGY, INC.

Bax (Δ 21): sc-6236

SANTA CRUZ BIOTECHNOLOGY
The Power to Question

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 (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 (Δ 21) is a rabbit polyclonal antibody raised against amino acids 1-171 of Baxα of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Bax (Δ 21) is recommended for detection of Baxα and Baxβ 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Bax (Δ 21) is also recommended for detection of Baxα and Baxβ in additional species, including canine, bovine and porcine.

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: COLO 320DM cell lysate: sc-2226, RAW 264.7 whole cell lysate: sc-2211 or CTLL-2 cell lysate: sc-2242.

STORAGE

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

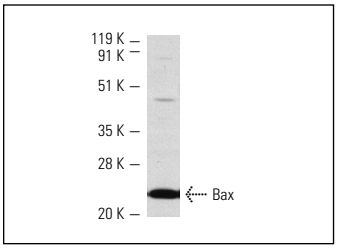
PROTOCOLS

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

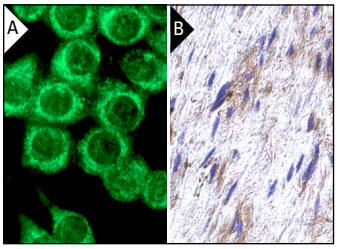
RESEARCH USE

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

DATA



Bax (Δ 21): sc-6236. Western blot analysis of Bax expression in RAW 264.7 whole cell lysate.



Bax (Δ 21): sc-6236. Immunofluorescence staining of methanol-fixed RAW 264.7 cells showing cytoplasmic localization (**A**). Immunoperoxidase staining of fomalin fixed, paraffin-embedded human colon tissue showing cytoplasmic staining of smooth muscle cells (**B**).

SELECT PRODUCT CITATIONS

1. Marzo, I., et al. 1998. Bax and adenine nucleotide translocator cooperate in the mitochondrial control of apoptosis. Science 281: 2027-2031.
2. Yang, G., et al. 2010. CXCR2 promotes ovarian cancer growth through dysregulated cell cycle, diminished apoptosis, and enhanced angiogenesis. Clin. Cancer Res. 16: 3875-3886.
3. Boivin, A., et al. 2011. Transient alteration of cellular redox buffering before irradiation triggers apoptosis in head and neck carcinoma stem and non-stem cells. PLoS ONE 6: e14558.
4. Chen, M., et al. 2011. Immune regulation through mitochondrion-dependent dendritic cell death induced by T regulatory cells. J. Immunol. 187: 5684-5692.
5. Lin, X., et al. 2011. An autoimmunized mouse model recapitulates key features in the pathogenesis of Sjögren's syndrome. Int. Immunol. 23: 613-624.
6. Walsh, S.B., et al. 2011. Cyclosporine a mediates pathogenesis of aggressive cutaneous squamous cell carcinoma by augmenting epithelial-mesenchymal transition: role of TGFβ signaling pathway. Mol. Carcinog. 50: 516-527.
7. Ray, R.M., et al. 2011. Mdm2 inhibition induces apoptosis in p53 deficient human colon cancer cells by activating p73- and E2F1-mediated expression of PUMA and Siva-1. Apoptosis 16: 35-44.
8. Goncalves, A., et al. 2012. Protective effects of the dipeptidyl peptidase IV inhibitor sitagliptin in the blood-retinal barrier in a type 2 diabetes animal model. Diabetes Obes. Metab. 14: 454-463.