SANTA CRUZ BIOTECHNOLOGY, INC.

Bcl-2 (C-2): sc-7382

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Bcl-2 is one among many key regulators of apoptosis, which are essential for proper development, tissue homeostasis, and protection against foreign pathogens. Human Bcl-2 is an anti-apoptotic, membrane-associated oncoprotein that can promote cell survival through protein-protein interactions with other Bcl-2 related family members, such as the death suppressors Bcl-x_L, Mcl-1, Bcl-w, and A1 or the death agonists Bax, Bak, Bik, Bad, and Bid. The anti-apoptotic function of Bcl-2 can also be regulated through proteolytic processing and phosphorylation. Bcl-2 may promote cell survival by interfering with the activation of the cytochrome c/Apaf-1 pathway through stabilization of the mitochondrial membrane. Mutations in the Bcl-2 gene can contribute to cancers where normal physiological cell death mechanisms are compromised by deregulation of the anti-apoptotic influence of Bcl-2.

CHROMOSOMAL LOCATION

Genetic locus: BCL2 (human) mapping to 18q21.33; Bcl2 (mouse) mapping to 1 E2.1.

SOURCE

Bcl-2 (C-2) is a mouse monoclonal antibody raised against amino acids 1-205 of Bcl-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Bcl-2 (C-2) is available conjugated to agarose (sc-7382 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-7382 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-7382 PE), fluorescein (sc-7382 FITC), Alexa Fluor® 488 (sc-7382 AF488), Alexa Fluor® 546 (sc-7382 AF546), Alexa Fluor® 594 (sc-7382 AF594) or Alexa Fluor® 647 (sc-7382 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-7382 AF680) or Alexa Fluor® 790 (sc-7382 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

In addition, Bcl-2 (C-2) is available conjugated to biotin (sc-7382 B), 200 µg/ml, for WB, IHC(P) and ELISA; and to either TRITC (sc-7382 TRITC, 200 µg/ml), PerCP (sc-7382 PerCP), PerCP-Cy5.5 (sc-7382 PCPC5) or Alexa Fluor® 405 (sc-7382 AF405), 100 tests in 2 ml, for IF, IHC(P) and FCM.

APPLICATIONS

Bcl-2 (C-2) is recommended for detection of Bcl-2 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 10^6 cells).

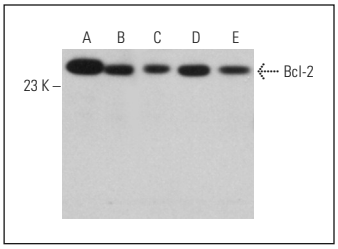
Suitable for use as control antibody for Bcl-2 siRNA (h): sc-29214, Bcl-2 siRNA (m): sc-29215, Bcl-2 shRNA Plasmid (h): sc-29214-SH, Bcl-2 shRNA Plasmid (m): sc-29215-SH, Bcl-2 shRNA (h) Lentiviral Particles: sc-29214-V and Bcl-2 shRNA (m) Lentiviral Particles: sc-29215-V.

Molecular Weight of Bcl-2: 26 kDa.

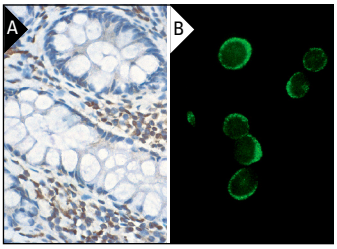
STORAGE

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

DATA



Bcl-2 (C-2): sc-7382. Western blot analysis of Bcl-2 expression in Jurkat (**A**), WEHI-231 (**B**), NIH/3T3 (**C**), PC-12 (**D**) and A-10 (**E**) whole cell lysates.



Bcl-2 (C-2): sc-7382. Immunoperoxidase staining of formalin-fixed, paraffin-embedded normal human colon tissue showing cytoplasmic staining of lymphoid cells (**A**). Immunofluorescence staining of methanol-fixed HL-60 cells showing cytoplasmic localization (**B**).

SELECT PRODUCT CITATIONS

1. Royuela, M., et al. 2000. IL-2, its receptors, and Bcl-2 and Bax genes in normal, hyperblastic and carcinomatous human prostate: immunohistochemical comparative analysis. Growth Factors 18: 135-146.
2. Shin, S.J., et al. 2017. The traditional Korean herbal medicine Ga-Gam-Nai-Go-Hyan suppresses testosterone-induced benign prostatic hyperplasia by regulating inflammatory responses and apoptosis. Exp. Ther. Med. 13: 1025-1031.
3. Borges, K.S., et al. 2017. The aurora kinase inhibitor AMG 900 increases apoptosis and induces chemosensitivity to anticancer drugs in the NCI-H295 adrenocortical carcinoma cell line. Anticancer Drugs 28: 634-644.
4. Rivero-Segura, N.A., et al. 2017. Prolactin-induced neuroprotection against glutamate excitotoxicity is mediated by the reduction of $[Ca^{2+}]i$ overload and NFκB activation. PLoS ONE 12: e0176910.
5. Choi, I.Y., et al. 2017. Dexmedetomidine alleviates cerebral ischemia-induced short-term memory impairment by inhibiting the expression of apoptosis-related molecules in the hippocampus of gerbils. Exp. Ther. Med. 13: 107-116.
6. Basarslan, S.K., et al. 2017. Protective effects of intralipid and caffeic acid phenyl esther (CAPE) on neurotoxicity induced by ethanol in rats. Turk. Neurosurg. 27: 66-73.
7. Massihnia, D., et al. 2017. Phospho-Akt overexpression is prognostic and can be used to tailor the synergistic interaction of Akt inhibitors with gemcitabine in pancreatic cancer. J. Hematol. Oncol. 10: 9.
8. Sun, L., et al. 2017. MIR506 induces autophagy-related cell death in pancreatic cancer cells by targeting the STAT3 pathway. Autophagy 13: 703-714.

RESEARCH USE

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