SANTA CRUZ BIOTECHNOLOGY, INC.

Bcl-2 (10C4): sc-23960



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 (10C4) is a mouse monoclonal antibody raised against a synthetic peptide corresponding to aa 61-76 of mouse Bcl-2.

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.

BcI-2 (10C4) is available conjugated to agarose (sc-23960 AC), 500 μg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-23960 HRP), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-23960 PE), fluorescein (sc-23960 FITC), Alexa Fluor[®] 488 (sc-23960 AF488), Alexa Fluor[®] 546 (sc-23960 AF546), Alexa Fluor[®] 594 (sc-23960 AF594) or Alexa Fluor[®] 647 (sc-23960 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-23960 AF680) or Alexa Fluor[®] 790 (sc-23960 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Bcl-2 (10C4) 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

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.

Positive Controls: Bcl-2 (m): 293T Lysate: sc-118779, WEHI-231 whole cell lysate: sc-2213 or rat spleen extract: sc-2397.

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 (10C4): sc-23960. Western blot analysis of Bcl-2 expression in WEHI-231 whole cell lysate (A) and mouse spleen (B) and rat spleen (C) tissue extracts.



Bcl-2 (10C4): sc-23960. Fluorescent western blot analysis of Bcl-2 expression in non-transfected 2931: sc-117752 (A) and mouse Bcl-2 transfected 2937: sc-118779 (B) whole cell lysates and rat spleen tissue extract (C). Blocked with UltraCruz[®] Blocking Reagent: sc-516214. Detection reagent used: m-lgG₁ BP-CFL 647: sc-533664.

SELECT PRODUCT CITATIONS

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- Zhuang, Z., et al. 2017. Notch 1 is a valuable therapeutic target against cell survival and proliferation in clear cell renal cell carcinoma. Oncol. Lett. 14: 3437-3444.
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- Lin, J., et al. 2021. G₂/M cell cycle arrest and apoptosis induced by COH-203 in human promyelocytic leukemia HL-60 cells. Oncol. Lett. 22: 815.
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RESEARCH USE

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