**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-xL, 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 phospho-rylation. 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; Bcl-2 (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, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Bcl-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, HRP and ELISA to either phosphoethrarin (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 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**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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