

p-Bcl-2 (367.Ser 70): sc-293128

BACKGROUND

Apoptosis is defined as a set of cascades which, when initiated, programs the cell to undergo lethal changes such as membrane blebbing, mitochondrial break down and DNA fragmentation. 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 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

p-Bcl-2 (367.Ser 70) is a mouse monoclonal antibody raised against a short amino acid sequence containing Ser 70 phosphorylated Bcl-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ lambda light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

p-Bcl-2 (367.Ser 70) is available conjugated to agarose (sc-293128 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; and to HRP (sc-293128 HRP), 200 µg/ml, for WB, IHC(P) and ELISA.

STORAGE

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

APPLICATIONS

p-Bcl-2 (367.Ser 70) is recommended for detection of Ser 70 phosphorylated 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

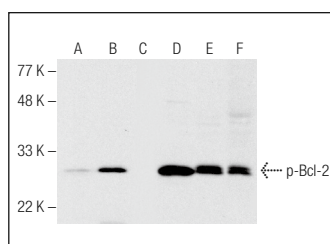
Molecular Weight of p-Bcl-2: 26 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, MOLT-4 cell lysate: sc-2233 or CCRF-CEM cell lysate: sc-2225.

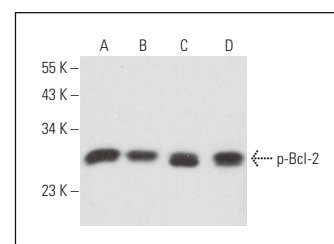
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG λ BP-HRP: sc-516132 or m-IgG λ BP-HRP (Cruz Marker): sc-516132-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto B Blocking Reagent: sc-2335 (use 50 mM NaF, sc-24988, as diluent), Lambda Phosphatase: sc-200312A and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



Western blot analysis of Bcl-2 phosphorylation in untreated (A, D), paclitaxel treated (B, E) and paclitaxel and lambda protein phosphatase (sc-200312A) treated (C, F) Jurkat whole cell lysates. Antibodies tested include p-Bcl-2 (367.Ser 70): sc-293128 (A, B, C) and Bcl-2 (C-2): sc-7382 (D, E, F).



p-Bcl-2 (367.Ser 70): sc-293128. Western blot analysis of Bcl-2 phosphorylation in Jurkat (A), MOLT-4 (B), CCRF-CEM (C) and Raji (D) whole cell lysates. Detection reagent used: m-IgG λ BP-HRP (Cruz Marker): sc-516132-CM.

SELECT PRODUCT CITATIONS

- Gilardini Montani, M.S., et al. 2019. Kaposi sarcoma herpes virus (KSHV) infection inhibits macrophage formation and survival by counteracting macrophage colony-stimulating factor (M-CSF)-induced increase of reactive oxygen species (ROS), c-Jun N-terminal kinase (JNK) phosphorylation and autophagy. *Int. J. Biochem. Cell Biol.* 114: 105560.
- Yan, X., et al. 2022. Tetratricopeptide repeat domain 36 protects renal tubular cells from cisplatin-induced apoptosis potentially via maintaining mitochondrial homeostasis. *Tissue Cell* 76: 101749.
- Tao, M., et al. 2022. Semaphorin 3F induces colorectal cancer cell chemosensitivity by promoting P27 nuclear export. *Front. Oncol.* 12: 899927.
- Kuramoto, K., et al. 2023. Exercise-activated hepatic autophagy via the FN1- α 5 β 1 Integrin pathway drives metabolic benefits of exercise. *Cell Metab.* 35: 620-632.e5.

RESEARCH USE

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

PROTOCOLS

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