

#2827 Store at -20°C

Phospho-Bcl-2 (Ser70) (5H2) Rabbit mAb

- Small 100 μl
(10 western blots)
- Large 300 μl
(30 western blots)



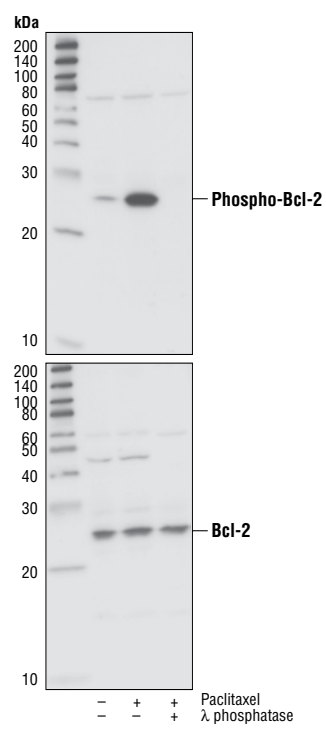
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rev. 08/10/10

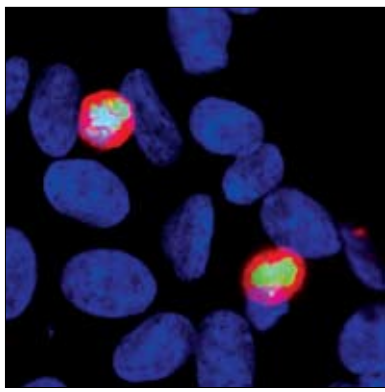
This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IF-IC, F Endogenous	H	28 kDa	Rabbit IgG**

Background: Bcl-2 exerts a survival function in response to a wide range of apoptotic stimuli through inhibition of mitochondrial cytochrome c release (1). It has been implicated in modulating mitochondrial calcium homeostasis and proton flux (2). Several phosphorylation sites have been identified within Bcl-2 including Thr56, Ser70, Thr74 and Ser87 (3). It has been suggested that these phosphorylation sites may be targets of the ASK1/MKK7/JNK1 pathway, and that phosphorylation of Bcl-2 may be a marker for mitotic events (4,5). Mutation of Bcl-2 at Thr56 or Ser87 inhibits its anti-apoptotic activity during glucocorticoid-induced apoptosis of T lymphocytes (6). Interleukin 3 and JNK-induced Bcl-2 phosphorylation at Ser70 may be required for its enhanced antiapoptotic functions (7).



Western blot analysis of extracts from Jurkat cells, untreated or treated with paclitaxel (1 μM , overnight) and with or without λ phosphatase, using Phospho-Bcl-2 (Ser70) (5H2) Rabbit mAb (upper) or Bcl-2 #2876 (lower).



Confocal immunofluorescent analysis of SH-SY5Y cells using Phospho-Bcl-2 (Ser70) (5H2) Rabbit mAb (red) and Phospho-Histone H3 (Ser10) (6G3) Mouse mAb #9706 (green). Blue pseudocolor = DRAQ5[®] #4084 (fluorescent DNA dye).

Specificity/Sensitivity: Phospho-Bcl-2 (Ser70) (5H2) Rabbit mAb detects endogenous levels of Bcl-2 only when phosphorylated at serine 70. The antibody does not cross-react with nonphosphorylated Bcl-2 at endogenous levels or with other Bcl-2 family members.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding serine 70 of human Bcl-2.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Entrez-Gene ID #596
Swiss-Prot Acc. #P10415

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 $\mu\text{g}/\text{ml}$ BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C . Do not aliquot the antibody.

***Species cross-reactivity is determined by western blot.**
****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

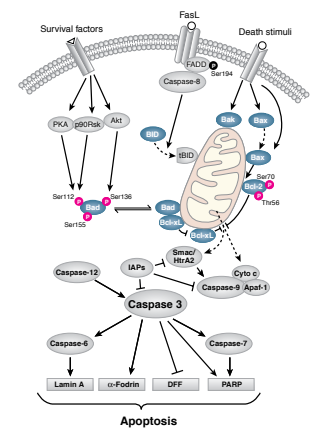
Western blotting	1:1000
Immunofluorescence (IF-IC)	1:100
Flow Cytometry	1:100

For application specific protocols please see the web page for this product at www.cellsignal.com.
Please visit www.cellsignal.com for a complete listing of recommended companion products.

Background References:

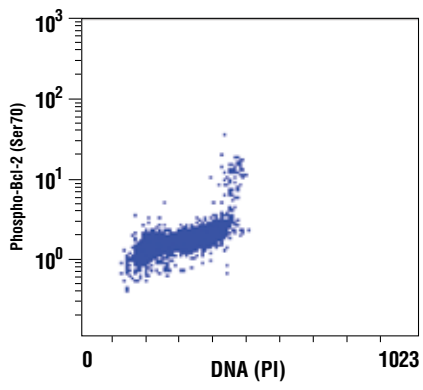
- (1) Murphy, K.M. et al. (2000) *Cell Death Differ.* 7, 102–111.
- (2) Zhu, L. et al. (1999) *J. Biol. Chem.* 274, 33267–33273.
- (3) Maundrell, K. et al. (1997) *J. Biol. Chem.* 272, 25238–25242.
- (4) Yamamoto, K. et al. (1999) *Mol. Cell. Biol.* 19, 8469–8478.
- (5) Ling, Y.H. et al. (1998) *J. Biol. Chem.* 273, 18984–18991.
- (6) Huang, S.J. and Cidlowski, J.A. (2002) *FASEB* 16, 825–832.
- (7) Deng, X. et al. (2001) *J. Biol. Chem.* 276, 23681–23688.

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Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.



Flow cytometric analysis of Jurkat cells, using Phospho-Bcl-2 (Ser70) (5H2) Rabbit mAb versus propidium iodide (DNA content).