

#2875 Store at -20°C

Phospho-Bcl-2 (Thr56) Antibody (Human Specific)

100 µl
 (10 western blots)



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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.	Source
W Endogenous	H	28 kDa	Rabbit**

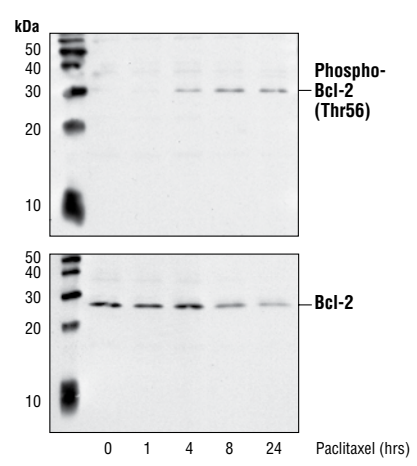
Background: Bcl-2 exerts a survival function in response to a wide range of apoptotic stimuli through inhibition of mitochondrial cytochrome c release (1). It has been implicated in modulating mitochondrial calcium homeostasis and proton flux (2). Several phosphorylation sites have been identified within 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).

Specificity/Sensitivity: Phospho-Bcl-2 (Thr56) Antibody (Human Specific) detects endogenous levels of Bcl-2 only when phosphorylated at threonine 56. It does not cross-react with non-phosphorylated Bcl-2 or with other Bcl-2 family members at endogenous levels.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide (KLH-coupled) corresponding to residues surrounding Thr56 of human Bcl-2. Antibodies are purified by protein A and peptide affinity chromatography.

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 J.* 16, 825–832.
- (7) Deng, X. et al. (2001) *J. Biol. Chem.* 276, 23681–23688.



Western blot analysis of Jurkat cells, untreated or treated with paclitaxel for the indicated times, using Phospho-Bcl-2 (Thr56) Antibody (Human Specific) (top) or Bcl-2 Antibody (Human Specific) #2872 (bottom).

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

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. 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

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.

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.

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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.