

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

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> W, FC-FP	<b>Reactivity:</b> H	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 28	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #P10415	<b>Entrez-Gene Id:</b> 596
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**Product Usage Information****Application**

Western Blotting  
Flow Cytometry (Fixed/Permeabilized)

**Dilution**

1:1000  
1:100 - 1:400

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #24152.

**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.

**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 anti-apoptotic functions (7).

**Background References**

1. Murphy, K.M. et al. (2000) *Cell Death Differ* 7, 102-11.
2. Zhu, L. et al. (1999) *J Biol Chem* 274, 33267-73.
3. Maundrell, K. et al. (1997) *J Biol Chem* 272, 25238-42.
4. Yamamoto, K. et al. (1999) *Mol Cell Biol* 19, 8469-78.
5. Ling, Y.H. et al. (1998) *J Biol Chem* 273, 18984-91.
6. Huang, S.T. and Cidlowski, J.A. (2002) *FASEB J* 16, 825-32.
7. Deng, X. et al. (2001) *J Biol Chem* 276, 23681-8.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

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

**Applications Key**

**W:** Western Blotting **FC-FP:** Flow Cytometry (Fixed/Permeabilized)

**Cross-Reactivity Key**

**H:** Human

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