

#2875 Store at -20°C

Phospho-Bcl-2 (Thr56) Antibody



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3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	H	Endogenous	28	Rabbit	#P10415	596

Product Usage Information	Application Western Blotting	Dilution 1:1000
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.	
Specificity / Sensitivity	Phospho-Bcl-2 (Thr56) Antibody 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 corresponding to residues surrounding Thr56 of human Bcl-2. Antibodies are purified by protein A and peptide affinity chromatography.	
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	<ol style="list-style-type: none"> 1. Murphy, K.M. et al. (2000) <i>Cell Death Differ</i> 7, 102-11. 2. Zhu, L. et al. (1999) <i>J Biol Chem</i> 274, 33267-73. 3. Maundrell, K. et al. (1997) <i>J Biol Chem</i> 272, 25238-42. 4. Yamamoto, K. et al. (1999) <i>Mol Cell Biol</i> 19, 8469-78. 5. Ling, Y.H. et al. (1998) <i>J Biol Chem</i> 273, 18984-91. 6. Huang, S.T. and Cidlowski, J.A. (2002) <i>FASEB J</i> 16, 825-32. 7. Deng, X. et al. (2001) <i>J Biol Chem</i> 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	WB: Western Blotting
Cross-Reactivity Key	H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus 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 GP: Guinea Pig Rab: rabbit All: all species expected
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