

BCL2L10 Antibody

100 µl
 (10 western blots)

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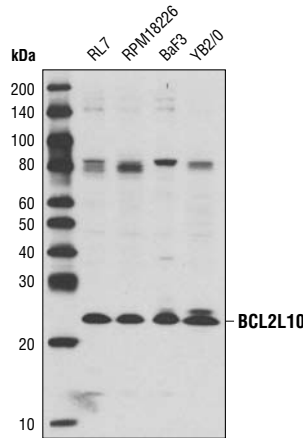
rev. 02/11/10

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.	Source
W Endogenous	H, M, R, Mk	23 kDa	Rabbit**

Background: The Bcl-2 family consists of a number of evolutionarily conserved proteins containing Bcl-2 homology domains (BH) that regulate apoptosis through control of mitochondrial membrane permeability and release of cytochrome c (1-3). Four BH domains have been identified (BH1-4) that mediate protein interactions. The family can be separated into three groups based upon function and sequence homology: pro-survival members include Bcl-2, Bcl-xL, Mcl-1, A1 and Bcl-w; pro-apoptotic proteins include Bax, Bak and Bok, and "BH3 only" proteins Bad, Bik, Bid, Puma, Bim, Bmf, Noxa and Hrk. Interactions between death-promoting and death-suppressing Bcl-2 family members has led to a rheostat model in which the ratio of pro-apoptotic and anti-apoptotic proteins controls cell fate (4). Thus, pro-survival members exert their behavior by binding to and antagonizing death-promoting members. In general, the "BH3-only members" can bind to and antagonize the pro-survival proteins leading to increased apoptosis (5). While some redundancy of this system likely exists, tissue specificity, transcriptional and post-translational regulation of many of these family members can account for distinct physiological roles.

Bcl-2-like 10 (BCL2L10), known as Diva or Boo in mouse (6,7) and Bcl-B in human (8), is a Bcl-2 family member with some unique properties. Expression of the mouse mRNA was detected in multiple embryonic tissues but restricted to adult ovary and testis (6,7); human Bcl-B appears to be more widely expressed (8). BCL2L10 contains BH1, 2, and 4 domains as well as a putative carboxy-terminal transmembrane domain. While some studies report the presence of a pro-apoptotic BH3 domain in BCL2L10, conflicting reports indicate an incomplete or absent BH3 domain (7-9). Similarly, some studies indicate that BCL2L10 induces apoptosis (6,9) while other data implies a role in suppressing cell death (7,8,10). BCL2L10 may function by differentially binding other Bcl-2 family members and through interaction with the apoptosome protein Apaf-1 (6,7). Despite its restricted expression in mice, Diva knockouts were fertile and exhibit no obvious developmental defects (11).



Western blot analysis of extracts from various cell lines using BCL2L10 Antibody.

Specificity/Sensitivity: BCL2L10 Antibody detects endogenous levels of total BCL2L10 protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Thr115 of human BCL2L10. Antibodies are purified by protein A and peptide affinity chromatography.

Entrez-Gene ID #10017
Swiss-Prot Acc. #Q9HD36

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.

Background References:

- (1) Cory, S. et al. (2003) *Oncogene* 22, 8590-607.
- (2) Antonsson, B. and Martinou, J.C. (2000) *Exp Cell Res* 256, 50-7.
- (3) Sharpe, J.C. et al. (2004) *Biochim Biophys Acta* 1644, 107-13.
- (4) Korsmeyer, S.J. et al. (1993) *Semin Cancer Biol* 4, 327-32.
- (5) Bouillet, P. and Strasser, A. (2002) *J Cell Sci* 115, 1567-74.
- (6) Inohara, N. et al. (1998) *J Biol Chem* 273, 32479-86.
- (7) Song, Q. et al. (1999) *EMBO J* 18, 167-78.
- (8) Ke, N. et al. (2001) *J Biol Chem* 276, 12481-4.
- (9) Lee, R. et al. (2001) *Biochim Biophys Acta* 1520, 187-94.
- (10) Naumann, U. et al. (2001) *FEBS Lett* 505, 23-6.
- (11) Russell, H.R. et al. (2002) *Mol Cell Biol* 22, 6866-70.

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.

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.