369 Store at -20C

BCL2L10 Antibody



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

Applications: Reactivity: Sensitivity: MW (kDa): Source: **UniProt ID:** Entrez-Gene Id: WR HMRMk Endogenous 23 Rabbit #Q9HD36 10017 **Product Usage** Application Dilution Information

Western Blotting 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 BCL2L10 Antibody detects endogenous levels of total BCL2L10 protein.

Source / PurificationPolyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro115 of human BCL2L10. Antibodies are purified by protein A and peptide affinity

chromatography.

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).

Background References

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- 4. Korsmeyer, S.J. et al. (1993) Semin Cancer Biol 4, 327-32.
- 5. Bouillet, P. and Strasser, A. (2002) $\emph{J Cell Sci}$ 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.
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- 11. Russell, H.R. et al. (2002) Mol Cell Biol 22, 6866-70.

Species Reactivity

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

Western Blot Buffer

BCL2L10 Antibody (#3869) Datasheet Without Images Cell Signaling Technology

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

Cross-Reactivity Key

WB: Western Blotting

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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