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Product Information

Anti-Bim
produced in rabbit, affinity isolated antibody

Catalog Number **B7929**

Synonym: Anti-BOD

Product Description
Anti-Bim (BOD) is produced in rabbit using as immunogen a synthetic peptide corresponding to amino acids 22-40 of the internal portion of human Bim (BOD)[1]. This sequence is identical in mouse and contains only one amino acid substitution in rat.

Anti-Bim detects human, mouse and rat Bim (23 kDa) by immunoblotting.

Members of the Bcl-2 protein family trigger apoptosis by either inhibiting or promoting cell death. Bcl-2 homology 3 (BH3) domain is a potent death domain. A growing subclass of the Bcl-2 family contains Bad, Bax, Bid, Bik, and Hrk that are pro-apoptotic proteins containing the BH3 domain. Bim (BOD) is a novel protein containing the short (nine amino acid) BH3 motif. Like Bcl-2, Bim possesses a hydrophobic C-terminus and localizes to intracytoplasmic. Bim interacts with diverse anti-apoptotic Bcl-2 proteins (i.e., Mcl-1, Bcl-2, Bcl-xL, Bcl-w, Bfl-1, and Epstein-Barr virus (EBV) BHRF-1) but not with different pro-apoptotic Bcl-2 proteins (i.e., BAD, Bak, Bok, and Bax). Bim is required for hematopoietic homeostasis and as a barrier to autoimmunity. Moreover, particular death stimuli appear to activate apoptosis through distinct BH3-only proteins. The Bim gene is also conserved in diverse mammalian species. Bim mRNA is ubiquitously expressed in ovary and many other tissues.[1,2,3]

Reagents
Supplied at 1 mg/mL in phosphate buffered saline, containing 0.02% sodium azide.

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability
Antibody can be stored at 2-8 °C for three months and −20 °C for one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Product Profile
Immunoblotting: the recommended concentration is 1.0 µg/mL (1:1,000 dilution) using total human K562 or HeLa cell lysates.

Note: In order to obtain best results and assay sensitivities of different techniques and preparations, we recommend determining optimal working dilutions by titration test.

References
1. O'Connor, L, et al., Bim: a novel member of the Bcl-2 family that promotes apoptosis. *EMBO J.*, **17**, 384-395 (1998).
2. Hsu, S.Y., et al., BOD (Bcl-2-related ovarian death gene) is an ovarian BH3 domain-containing proapoptotic Bcl-2 protein capable of dimerization with diverse antiapoptotic Bcl-2 members. *Mol. Endocrinol.*, **12**, 1432-1440 (1998).
3. Bouillet, P, et al., Proapoptotic Bcl-2 relative Bim required for certain apoptotic responses, leukocyte homeostasis, and to preclude autoimmunity. *Science*, **286**, 1735-1738 (1999).

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