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Store at -20C
#5889

Bmf (G81) Antibody

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

Applications: W	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 21	Source/Isotype: Rabbit	UniProt ID: #Q96LC9	Entrez-Gene Id: 90427
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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

Bmf (G81) Antibody recognizes endogenous levels of total Bmf protein.

Species predicted to react based on 100% sequence homology

Mouse, Rat

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly81 of human Bmf protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

The BH3-only proteins are a group of pro-apoptotic proteins of the Bcl-2 family that share the conserved BH3 domain but lack BH1, BH2, and BH4 (1). This short BH3 domain is essential for interaction with pro-survival members of the Bcl-2 family and allows for their pro-apoptotic activity. A large number of BH3-only proteins have been identified in mammals, including Bmf, Bad, Bik, Bid, Bim, Hrk, Noxa, and Puma. Many of these proteins appear to display distinct roles in apoptosis through tissue-specific expression. Bmf (Bcl-2-modifying factor) was originally identified in a yeast two-hybrid screen using the pro-survival protein Mcl-1 as bait (2). Bmf appears to be widely expressed, with bmf mRNA observed in cell lines of B- and T-lymphoid, myeloid, or fibroblastoid origin and in mouse embryos at all developmental stages. Bmf protein is seen most abundantly in pancreas, liver, kidney, and hematopoietic tissues (2, 3). Bmf interacts with several pro-survival Bcl-2 proteins including Mcl-1, Bcl-2, Bcl-xL, and Bcl-w, and the interaction depends on the BH3 domain (2). Like Bim, Bmf has been reported to bind to cytoskeletal structures. Bmf is normally sequestered to myosin V motors through association with dynein light chain 2 (DLC2). Certain damage signals, such as the detachment of adherent cell lines from their substratum (anoikis), triggers the release of Bmf and subsequent binding to the pro-survival Bcl-2 proteins (2).

Background References

1. Puthalakath, H. and Strasser, A. (2002) *Cell Death Differ* 9, 505-12.
2. Puthalakath, H. et al. (2001) *Science* 293, 1829-32.
3. Morales, A.A. et al. (2004) *Leukemia* 18, 41-7.

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

Cross-Reactivity Key

H: Human

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