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Bim (C34C5) Rabbit mAb (Alexa Fluor® 700 Conjugate)**Cell Signaling**
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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: FC-FP	Reactivity: H M R	Sensitivity: Endogenous	Source/Isotype: Rabbit IgG	UniProt ID: #O43521	Entrez-Gene Id: 10018
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Product Usage Information	Application Flow Cytometry (Fixed/Permeabilized)	Dilution 1:50
Storage	Supplied in PBS (pH 7.2), less than 0.1% sodium azide and 2 mg/ml BSA. Store at 4°C. Do not aliquot the antibody. Protect from light. Do not freeze.	
Specificity / Sensitivity	Bim (C34C5) Rabbit mAb (Alexa Fluor® 700 Conjugate) detects endogenous levels of total Bim (EL, L, and S isoforms) protein.	
Species predicted to react based on 100% sequence homology:	Monkey, Bovine, Dog, Pig	
Source / Purification	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro25 of Bim.	
Product Description	This Cell Signaling Technology antibody is conjugated to Alexa Fluor® 700 fluorescent dye and tested in-house for direct flow cytometric analysis in human cells. This antibody is expected to exhibit the same species cross-reactivity as the unconjugated Bim (C34C5) Rabbit mAb #2933.	
Background	Bim/Bod is a pro-apoptotic protein belonging to the BH3-only group of Bcl-2 family members including Bad, Bid, Bik, Hrk, and Noxa that contain a BH3 domain but lack other conserved BH1 or BH2 domains (1,2). Bim induces apoptosis by binding to and antagonizing anti-apoptotic members of the Bcl-2 family. Interactions have been observed with Bcl-2, Bcl-xL, Mcl-1, Bcl-w, Bfl-1, and BHRF-1 (1,2). Bim functions in regulating apoptosis associated with thymocyte negative selection and following growth factor withdrawal, during which Bim expression is elevated (3-6). Three major isoforms of Bim are generated by alternative splicing: Bim _{EL} , Bim _L , and Bim _S (1). The shortest form, Bim _S , is the most cytotoxic and is generally only transiently expressed during apoptosis. The Bim _{EL} and Bim _L isoforms may be sequestered to the dynein motor complex through an interaction with the dynein light chain and released from this complex during apoptosis (7). Apoptotic activity of these longer isoforms may be regulated by phosphorylation (8,9). Environmental stress triggers Bim phosphorylation by JNK and results in its dissociation from the dynein complex and increased apoptotic activity.	
Background References	<ol style="list-style-type: none"> 1. O'Connor, L. et al. (1998) <i>EMBO J</i> 17, 384-95. 2. Hsu, S.Y. et al. (1998) <i>Mol Endocrinol</i> 12, 1432-40. 3. Bouillet, P. et al. (2002) <i>Nature</i> 415, 922-6. 4. Whitfield, J. et al. (2001) <i>Neuron</i> 29, 629-43. 5. Dijkers, P.F. et al. (2000) <i>Curr Biol</i> 10, 1201-4. 6. Ley, R. et al. (2003) <i>J Biol Chem</i> 278, 18811-6. 7. Puthalakath, H. et al. (1999) <i>Mol Cell</i> 3, 287-96. 8. Lei, K. and Davis, R.J. (2003) <i>Proc Natl Acad Sci U S A</i> 100, 2432-7. 9. Putcha, G.V. et al. (2003) <i>Neuron</i> 38, 899-914. 	

Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
Applications Key	FC-FP: Flow Cytometry (Fixed/Permeabilized)
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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