



Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

Store at +4C
#10408

Bim (C34C5) Rabbit mAb (Alexa Fluor® 647 Conjugate)

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 |
|-------------------------------|-----------------------------|-----------------------------------|--------------------------------------|-------------------------------|---------------------------------|

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® 647 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.

Description

This Cell Signaling Technology antibody is conjugated to Alexa Fluor® 647 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

- O'Connor, L. et al. (1998) *EMBO J* 17, 384-95.
- Hsu, S.Y. et al. (1998) *Mol Endocrinol* 12, 1432-40.
- Bouillet, P. et al. (2002) *Nature* 415, 922-6.
- Whitfield, J. et al. (2001) *Neuron* 29, 629-43.
- Dijkers, P.F. et al. (2000) *Curr Biol* 10, 1201-4.
- Ley, R. et al. (2003) *J Biol Chem* 278, 18811-6.
- Puthalakath, H. et al. (1999) *Mol Cell* 3, 287-96.
- Lei, K. and Davis, R.J. (2003) *Proc Natl Acad Sci U S A* 100, 2432-7.
- Putcha, G.V. et al. (2003) *Neuron* 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

Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

Alexa Fluor is a registered trademark of Life Technologies Corporation.

This product is provided under an intellectual property license from Life Technologies Corporation. The transfer of this product is conditioned on the buyer using the purchased product solely in research conducted by the buyer, excluding contract research or any fee for service research, and the buyer must not (1) use this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; or (c) manufacturing or quality assurance or quality control, and/or (2) sell or transfer this product or its components for resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, CA 92008 USA or outlicensing@lifetech.com.

U.S. Patent No. 7,429,487, foreign equivalents, and child patents deriving therefrom.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.