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# Bim Antibody

Store at -20C  
#2819

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

<b>Applications:</b> W, IP	<b>Reactivity:</b> H M R Mk	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 23, 15, 12	<b>Source/Isotype:</b> Rabbit	<b>UniProt ID:</b> #O43521	<b>Entrez-Gene Id:</b> 10018
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## Product Usage Information

### Application

Western Blotting  
Immunoprecipitation

### Dilution

1:1000  
1:200

## 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

Bim Antibody detects endogenous levels of total Bim (EL, L and S isoforms) protein.

## Species predicted to react based on 100% sequence homology

Pig

## Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human Bim. Antibodies are purified by protein A and peptide affinity chromatography.

## 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<sub>EL</sub>, Bim<sub>L</sub>, and Bim<sub>S</sub> (1). The shortest form, Bim<sub>S</sub>, is the most cytotoxic and is generally only transiently expressed during apoptosis. The Bim<sub>EL</sub> and Bim<sub>L</sub> 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

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- 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.
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- 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).

## 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 **IP:** Immunoprecipitation

## Cross-Reactivity Key

**H:** Human **M:** Mouse **R:** Rat **Mk:** Monkey

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