

# Bim (N-20): sc-8265

## BACKGROUND

Pro-apoptotic Bcl-2 family members promote cell death by neutralizing their anti-apoptotic relatives, which otherwise maintain cell viability by regulating caspase activity. Bim belongs to the BH3-only subgroup of Bcl-2 related proteins and exists in three distinct isoforms, Bim<sub>S</sub> (short), Bim<sub>L</sub> (long) and Bim<sub>EL</sub> (extra long). ERK1/2 phosphorylates Bim<sub>EL</sub>, resulting in rapid degradation of the isoform via the proteasome pathway. At least three sites for ERK1/2 phosphorylation exist on Bim<sub>EL</sub>, whereas ERK1/2 does not effect Bim<sub>S</sub> or Bim<sub>L</sub>, implying a unique role for Bim<sub>EL</sub> in cell survival signaling.

## CHROMOSOMAL LOCATION

Genetic locus: BCL2L11 (human) mapping to 2q13; Bcl2l11 (mouse) mapping to 2 F1.

## SOURCE

Bim (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Bim<sub>EL</sub> of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-8265 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Bim (N-20) is recommended for detection of Bim<sub>EL</sub>, Bim<sub>L</sub> and Bim<sub>S</sub> of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Bim (N-20) is also recommended for detection of Bim<sub>EL</sub>, Bim<sub>L</sub> and Bim<sub>S</sub> in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for Bim siRNA (h): sc-29802, Bim siRNA (m): sc-29803, Bim shRNA Plasmid (h): sc-29802-SH, Bim shRNA Plasmid (m): sc-29803-SH, Bim shRNA (h) Lentiviral Particles: sc-29802-V and Bim shRNA (m) Lentiviral Particles: sc-29803-V.

Molecular Weight of Bim<sub>S</sub>: 19 kDa.

Molecular Weight of Bim<sub>L</sub>: 21 kDa.

Molecular Weight of Bim<sub>EL</sub>: 24 kDa.

Positive Controls: HuT 78 whole cell lysate: sc-2208 or HL-60 whole cell lysate: sc-2209.

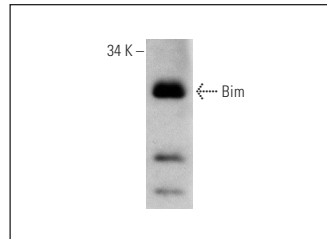
## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## DATA



Bim (N-20): sc-8265. Western blot analysis of Bim expression in HuT 78 whole cell lysate.

## SELECT PRODUCT CITATIONS

1. Claessens, Y.E., et al. 2002. *In vitro* proliferation and differentiation of erythroid progenitors from patients with myelodysplastic syndromes: evidence for Fas-dependent apoptosis. *Blood* 99: 1594-1601.
2. Korhonen, L., et al. 2003. Increase in Bcl-2 phosphorylation and reduced levels of BH3-only Bcl-2 family proteins in kainic acid-mediated neuronal death in the rat brain. *Eur. J. Neurosci.* 18: 1121-1134.
3. Sunters, A., et al. 2006. Paclitaxel-induced nuclear translocation of FOXO3a in breast cancer cells is mediated by c-Jun NH<sub>2</sub>-terminal kinase and Akt. *Cancer Res.* 66: 212-220.
4. Bustamante, J., et al. 2007. A novel X-linked recessive form of Mendelian susceptibility to mycobacterial disease. *J. Med. Genet.* 44: e65.
5. Dalle, S., et al. 2009. *In vivo* model of follicular lymphoma resistant to rituximab. *Clin. Cancer Res.* 15: 851-857.
6. Dalle, S., et al. 2011. Preclinical studies on the mechanism of action and the anti-lymphoma activity of the novel anti-CD20 antibody GA101. *Mol. Cancer Ther.* 10: 178-185.
7. Liu, Z., et al. 2015. Bim and VDAC1 are hierarchically essential for mitochondrial ATF2 mediated cell death. *Cancer Cell Int.* 15: 34.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **Bim (H-5): sc-374358** or **Bim (Ham 151-149): sc-130511**, our highly recommended monoclonal alternatives to Bim (N-20). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Bim (H-5): sc-374358**.