### SANTA CRUZ BIOTECHNOLOGY, INC.

# BID (N-19): sc-6539



#### BACKGROUND

Members of the Bcl-2 family of proteins interact to regulate programmed cell death, or apoptosis. Various homodimers and heterodimers formed by proteins in this family can either promote or inhibit apoptosis. Bcl-2 blocks cell death following a variety of stimuli and confers a death-sparing effect on certain hematopoietic cell lines following growth factor withdrawal. Additional apoptotic inhibitors in this family include Bcl-x, Bcl-w, Mcl-1, Bag-1 and A1. Proapoptotic members of this family include Bax, Bad, Bak, Bik (NBK) and BID. BID contains a BH3 domain which allows it to dimerize with and counter the death repressor effects of Bcl-2. BID has also been shown to heterodimerize with Bcl-x and the death agonist Bax. BID is localized predominantly in the cytosol and is also present in membrane fractions. It is highly expressed in kidney and can also be detected in brain, spleen, liver, testis and lung.

#### CHROMOSOMAL LOCATION

Genetic locus: BID (human) mapping to 22q11.21.

#### SOURCE

BID (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of BID of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

BID (N-19) is available conjugated to agarose (sc-6539 AC), 500  $\mu g/0.25$  ml agarose in 1 ml, for IP.

Blocking peptide available for competition studies, sc-6539 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

BID (N-19) is recommended for detection of BID of 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).

Suitable for use as control antibody for BID siRNA (h): sc-29800, BID shRNA Plasmid (h): sc-29800-SH and BID shRNA (h) Lentiviral Particles: sc-29800-V.

Molecular Weight of BID: 22 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or IMR-32 cell lysate: sc-2409.

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

#### **RESEARCH USE**

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

#### DATA



BID (N-19): sc-6539. Western blot analysis of BID expression in Jurkat (A) and IMR-32 (B) whole cell lysates

#### SELECT PRODUCT CITATIONS

- Srivastava, M., et al. 2001. Involvement of Bcl-2 and Bax in photodynamic therapy-mediated apoptosis. J. Biol. Chem. 276: 15481-15488.
- 2. Chen, G.G., et al. 2001. Decreased expression of BID in human hepatocellular carcinoma is related to hepatitis B virus X protein. Eur. J. Cancer 37: 1695-1702.
- Gajate, C. and Mollinedo, F. 2007. Edelfosine and perifosine induce selective apoptosis in multiple myeloma by recruitment of death receptors and downstream signaling molecules into lipid rafts. Blood 109: 711-719.
- Gajate, C., et al. 2009. Lipid raft connection between extrinsic and intrinsic apoptotic pathways. Biochem. Biophys. Res. Commun. 380: 780-784.
- Cetindere, T., et al. 2010. Induction of indoleamine 2, 3-dioxygenase by death receptor activation contributes to apoptosis of melanoma cells via mitochondrial damage-dependent Ros accumulation. Cell. Signal. 22: 197-211.
- 6. Orzechowska, S., et al. 2011. Cholesterol level determines viability and mitogenicity, but it does not affect sodium butyrate-dependent sensitization of COLO 205 cells to TNF- $\alpha$ -induced apoptosis. Oncol. Rep. 25: 573-582.
- Lee, K.W., et al. 2012. Sulfuretin from heartwood of *Rhus verniciflua* triggers apoptosis through activation of Fas, Caspase-8, and the mitochondrial death pathway in HL-60 human leukemia cells. J. Cell. Biochem. 113: 2835-2844.
- Kumar, S., et al. 2013. The anticancer potential of flavonoids isolated from the stem bark of *Erythrina suberosa* through induction of apoptosis and inhibition of STAT signaling pathway in human leukemia HL-60 cells. Chem. Biol. Interact. 205: 128-137.

## MONOS Satisfation Guaranteed

Try **BID (B-3):** sc-373939 or **BID (E-7):** sc-514622, our highly recommended monoclonal aternatives to BID (N-19). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **BID (B-3):** sc-373939.