SANTA CRUZ BIOTECHNOLOGY, INC.

BID (5C9): sc-56025

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 A1, Bag-1, Bcl-w, Bcl-x and Mcl-1. Pro-apoptotic 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.

REFERENCES

1. Vaux, D.L., et al. 1988. Bcl-2 promotes the survival of hemopoietic cells and cooperates with c-Myc to immortalize pre-B cells. Nature 335: 440-442.
2. Nunez, G., et al. 1990. Deregulated Bcl-2 gene expression selectively prolongs survival of growth factor-deprived hemopoietic cell lines. J. Immunol. 144: 3602-3610.
3. Oltvai, Z.N., et al. 1993. Bcl-2 heterodimerizes *in vivo* with a conserved homolog, Bax, that accelerates programmed cell death. Cell 74: 609-619.

CHROMOSOMAL LOCATION

Genetic locus: BID (human) mapping to 22q11.21; Bid (mouse) mapping to 6 F1.

SOURCE

BID (5C9) is a mouse monoclonal antibody raised against amino acids 61-118 of BID of human origin.

This product has been manufactured by MBL International Corporation.

PRODUCT

Each vial contains 50 µg IgG_1 in 0.5 ml of PBS with < 0.1% sodium azide, 0.1% gelatin and 5% glycerol.

APPLICATIONS

BID (5C9) is recommended for detection of BID of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)]; also recommended for detection of bands at 20, 16 and 14 kDa corresponding to the cleaved forms of BID in apoptotic cells.

Suitable for use as control antibody for BID siRNA (h): sc-29800, BID siRNA (m): sc-29801, BID shRNA Plasmid (h): sc-29800-SH, BID shRNA Plasmid (m): sc-29801-SH, BID shRNA (h) Lentiviral Particles: sc-29800-V and BID shRNA (m) Lentiviral Particles: sc-29801-V.

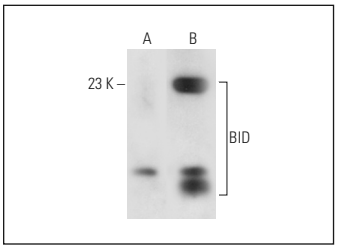
Molecular Weight of BID: 22 kDa.

Positive Controls: BID (h): 293T Lysate: sc-115264, BID (m): 293T Lysate: sc-118811 or HeLa whole cell lysate: sc-2200.

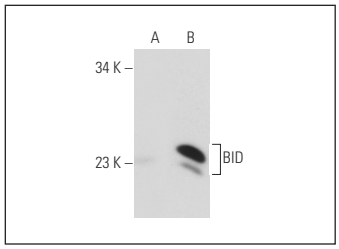
STORAGE

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

DATA



BID (5C9): sc-56025. Western blot analysis of BID expression in non-transfected: sc-117752 (**A**) and human BID transfected: sc-115264 (**B**) 293T whole cell lysates.



BID (5C9): sc-56025. Western blot analysis of BID expression in non-transfected: sc-117752 (**A**) and mouse BID transfected: sc-118811 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Chetoui, N., et al. 2008. Down-regulation of Mcl-1 by small interfering RNA sensitizes resistant melanoma cells to fas-mediated apoptosis. Mol. Cancer Res. 6: 42-52.
2. Lee, S.J., et al. 2009. Combined application of camptothecin and the guanylate cyclase activator YC-1: impact on cell death and apoptosis-related proteins in ovarian carcinoma cell lines. Chem. Biol. Interact. 181: 185-192.
3. Lee, C.S., et al. 2010. 18β-glycyrrhetinic acid potentiates apoptotic effect of trichostatin A on human epithelial ovarian carcinoma cell lines. Eur. J. Pharmacol. 649: 354-361.
4. Jang, E.R., et al. 2011. Different effect of protein kinase B/Akt and extracellular signal-regulated kinase inhibition on trichostatin A-induced apoptosis in epithelial ovarian carcinoma cell lines. Mol. Cell. Biochem. 353: 1-11.
5. Choi, Y.B., et al. 2012. Human herpesvirus 8 interferon regulatory factor-mediated BH3-only protein inhibition via Bid BH3-B mimicry. PLoS Pathog. 8: e1002748.
6. Lee, C.S., et al. 2012. Guanylate cyclase activator YC-1 potentiates apoptotic effect of licochalcone A on human epithelial ovarian carcinoma cells via activation of death receptor and mitochondrial pathways. Eur. J. Pharmacol. 683: 54-62.
7. Lee, S.A., et al. 2013. Brefeldin a induces apoptosis by activating the mitochondrial and death receptor pathways and inhibits focal adhesion kinase-mediated cell invasion. Basic Clin. Pharmacol. Toxicol. 113: 329-338.
8. López-Huertas, M.R., et al. 2013. The presence of HIV-1 Tat protein second exon delays Fas protein-mediated apoptosis in $CD4^+$ T lymphocytes: a potential mechanism for persistent viral production. J. Biol. Chem. 288: 7626-7644.

RESEARCH USE

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