SANTA CRUZ BIOTECHNOLOGY, INC.

BID (D-19): sc-6291

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

CHROMOSOMAL LOCATION

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

SOURCE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-6291 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

BID (D-19) 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), 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), immunohistochemistry (including paraffin-embedded sections) (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 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, HeLa whole cell lysate: sc-2200 or RAW 264.7 whole cell lysate: sc-2211.

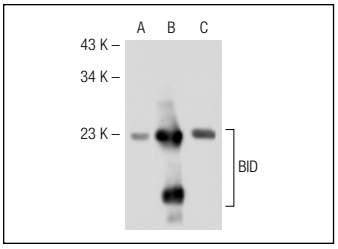
STORAGE

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

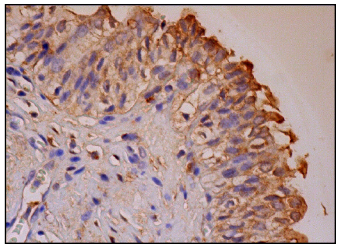
RESEARCH USE

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

DATA



BID (D-19): sc-6291. Western blot analysis of BID expression in non-transfected 293T: sc-117752 (**A**) and human BID transfected 293T: sc-115264 (**B**) and HeLa (**C**) whole cell lysates.



BID (D-19): sc-6291. Immunoperoxidase staining of formalin fixed, paraffin-embedded human urinary bladder tissue showing cytoplasmic staining of urothelial cells.

SELECT PRODUCT CITATIONS

1. Esposti, M.D., et al. 2001. BID, a widely expressed proapoptotic protein of the Bcl-2 family, displays lipid transfer activity. Mol. Cell. Biol. 21: 7268-7276.
2. Kim, Y.J. and Lee, C.S. 2010. Tyrosine kinase inhibitor AG126 reduces 7-ketocholesterol-induced cell death by suppressing mitochondria-mediated apoptotic process. Neurochem. Res. 35: 603-612.
3. Ha, S.W. and Lee, C.S. 2010. Differential effect of platelet activating factor on 1-methyl-4-phenylpyridinium-induced cell death through regulation of apoptosis-related protein activation. Neurochem. Int. 56: 819-828.
4. Roy, D.N., et al. 2011. Combination therapy with andrographolide and δ-penicillamine enhanced therapeutic advantage over monotherapy with δ-penicillamine in attenuating fibrogenic response and cell death in the periportal zone of liver in rats during copper toxicosis. Toxicol. Appl. Pharmacol. 250: 54-68.
5. Jang, E.R. and Lee, C.S. 2011. 7-ketocholesterol induces apoptosis in differentiated PC12 cells via reactive oxygen species-dependent activation of NFκB and Akt pathways. Neurochem. Int. 58: 52-59.
6. Xiao, T., et al. 2013. Activation of an apoptotic signal transduction pathway involved in the upregulation of calpain and apoptosis-inducing factor in aldosterone-induced primary cultured cardiomyocytes. Food Chem. Toxicol. 53: 364-370.
7. Fazzi, F., et al. 2014. TNFR1/phox interaction and TNFR1 mitochondrial translocation thwart silica-induced pulmonary fibrosis. J. Immunol. 192: 3837-3846.