



BID (h): 293T Lysate: sc-115264

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., Cory, S. and Adams, J.M. 1988. Bcl-2 promotes the survival of hemopoietic cells and cooperates with c-Myc to immortalize pre-B cells. *Nature* 335: 440-442.
2. Nuñez, G., London, L., Hockenbery, D., Alexander, M. and McKearn, J.P. 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., Millman, C.L. and Korsmeyer, S.J. 1993. Bcl-2 heterodimerizes *in vivo* with a conserved homolog, Bax, that accelerates programmed cell death. *Cell* 74: 609-619.
4. Sato, T., Hanada, M., Bodrug, S., Irie, S., Iwama, N., Boise, L.H., Thompson, C.B., Golemis, E., Fong, L., Wang, H.-G. and Reed, J.C. 1994. Interactions among members of the Bcl-2 protein family analyzed with a yeast two-hybrid system. *Proc. Natl. Acad. Sci. USA* 91: 9238-9242.
5. Oltvai, Z.N. and Korsmeyer, C.J. 1994. Checkpoints of dueling dimers foil death wishes. *Cell* 79: 189-192.
6. Yang, E. and Korsmeyer, S.J. 1996. Molecular thanatopsis: a discourse on the Bcl-2 family and cell death. *Blood* 88: 386-401.
7. Wang, K., Yin, X.-M., Chao, D.T., Millman, C.L. and Korsmeyer, S.J. 1996. BID: a novel BH3 domain-only death agonist. *Genes Dev.* 10: 2859-2869.
8. Nagata, S. 1997. Apoptosis by death factor. *Cell* 88: 355-365.
9. de Luján Alvarez, M., Quiroga, A.D., Ronco, M.T., Parody, J.P., Ochoa, J.E., Monti, J.A., Carnovale, C.E. and Carrillo, M.C. 2006. Time-dependent onset of Interferon- α 2b-induced apoptosis in isolated hepatocytes from preneoplastic rat livers. *Cytokine* 36: 245-253.

CHROMOSOMAL LOCATION

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

PRODUCT

BID (h): 293T Lysate represents a lysate of human BID transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

BID (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive BID antibodies. Recommended use: 10-20 μ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

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