Bak (h2): 293T Lysate: sc-159943



The Power to Question

BACKGROUND

The Bcl-2 family of proteins is characterized by its ability to modulate cell death (apoptosis) under a broad range of physiologic conditions. Bcl-2 and several related proteins function to inhibit apoptosis, while other members of the Bcl-2 family, such as Bax, accelerate death under various conditions. One member of the Bcl-2 family, designated Bak, functions primarily to enhance apoptotic cell death following appropriate activating signals and, in addition, counteracts the protection from apoptosis provided by Bcl-2. Expression of Bak is widespread in a broad range of cells, including various long-lived, terminally differentiated cell types, suggesting that its cell-death-inducing activity is broadly distributed and that the regulation of inhibitors of apoptosis may represent an important determinant of tissue-specific modulation of apoptosis.

REFERENCES

- Tsujimoto, Y., et al. 1985. The t(14;18) chromosome translocations involved in B cell neoplasms results from mistakes in VDJ joining. Science 229: 1390-1393.
- Bakhshi, A., et al. 1985. Cloning the chromosomal breakpoint of t(14;18) human lymphomas: clustering around JH on chromosome 14 and near a transcriptional unit on 18. Cell 41: 899-906.
- Hockenbery, D.M., et al. 1991. Bcl-2 protein is topographically restricted in tissues characterized by apoptotic cell death. Proc. Natl. Acad. Sci. USA 88: 6961-6965
- 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.
- Yin, X.M., et al. 1994. BH1 and BH2 domains of Bcl-2 are required for inhibition of apoptosis and heterodimerization with Bax. Nature 369: 321-323.
- 6. Chittenden, T., et al. 1995. Induction of apoptosis by the Bcl-2 homologue Bak. Nature 374: 733-736.
- 7. Kiefer, M.C., et al. 1995. Modulation of apoptosis by the widely distributed Bcl-2 homologue Bak. Nature 374: 736-739.
- 8. Douglas, A.E., et al. 2007. Structure of M11L: A myxoma virus structural homolog of the apoptosis inhibitor, Bcl-2. Protein Sci. 16: 695-703.
- 9. Shroff, E.H., et al. 2007. Role of Bcl-2 Family members in Anoxia induced cell death. Cell Cycle 6: 807-809.

CHROMOSOMAL LOCATION

Genetic locus: BAK1 (human) mapping to 6p21.31.

PRODUCT

Bak (h2): 293T Lysate represents a lysate of human Bak transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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.

APPLICATIONS

Bak (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Bak antibodies. Recommended use: 10-20 µl per lane.

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

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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com