# Hrk (G-18): sc-26825



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, NBK (Bik), BID and Hrk. Hrk (for harakiri), designated DP5 or neuronal death protein in mouse and rat, contains a BH3 domain with high homology to other Bcl-2 family members but lacks the conserved BH1 and BH2 domains. Physical interaction of Hrk with Bcl-2 or Bcl-x<sub>l</sub> inhibits the apoptotic activity of Hrk.

# **REFERENCES**

- 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.
- 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.
- 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.
- Sato, T., et al. 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.
- Oltvai, Z.N., et al. 1994. Checkpoints of dueling dimers foil death wishes. Cell 79: 189-192.
- 6. Yang, E., et al. 1996. Molecular thanatopsis: a discourse on the Bcl-2 family and cell death. Blood 88: 386-401.
- Wang, K., et al. 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. Inohara, N., et al. 1997. Harakiri, a novel regulator of cell death, encodes a protein that activates apoptosis and interacts selectively with survival-promoting proteins Bcl-2 and Bcl-x<sub>1</sub>. EMBO J. 16: 1686-1694.

## CHROMOSOMAL LOCATION

Genetic locus: HRK (human) mapping to 12q24.22; Bid3 (mouse) mapping to 5 F.

## SOURCE

Hrk (G-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Hrk 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.

Blocking peptide available for competition studies, sc-26825 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

Hrk (G-18) is recommended for detection of Hrk of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 Hrk siRNA (h): sc-37303.

# **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

#### **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.

#### **PROTOCOLS**

See our web site at www.scbt.com or our catalog 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