

Bak (H-211): sc-7873

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.

CHROMOSOMAL LOCATION

Genetic locus: BAK1 (human) mapping to 6p21.31; Bak1 (mouse) mapping to 17 A3.3.

SOURCE

Bak (H-211) is a rabbit polyclonal antibody raised against amino acids 1-211 representing full length Bak of human origin.

PRODUCT

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

APPLICATIONS

Bak (H-211) is recommended for detection of Bak 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Bak (H-211) is also recommended for detection of Bak in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Bak siRNA (h): sc-29786, Bak siRNA (m): sc-29785, Bak shRNA Plasmid (h): sc-29786-SH, Bak shRNA Plasmid (m): sc-29785-SH, Bak shRNA (h) Lentiviral Particles: sc-29786-V and Bak shRNA (m) Lentiviral Particles: sc-29785-V.

Molecular Weight of Bak: 30 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, A-431 whole cell lysate: sc-2201 or MOLT-4 cell lysate: sc-2233.

RESEARCH USE

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

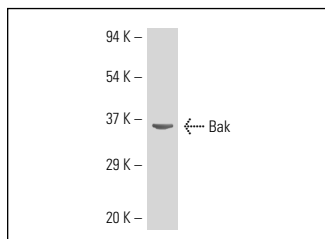
PROTOCOLS

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

STORAGE

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

DATA



Bak (H-211): sc-7873. Western blot analysis of Bak expression in Jurkat whole cell lysate.

SELECT PRODUCT CITATIONS

- Sun, Y.F., et al. 2001. Neuron-specific Bcl-2 homology 3 domain-only splice variant of Bak is anti-apoptotic in neurons, but pro-apoptotic in non-neuronal cells. *J. Biol. Chem.* 276: 16240-16247.
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- Dalle, S., et al. 2009. *In vivo* model of follicular lymphoma resistant to rituximab. *Clin. Cancer Res.* 15: 851-857.
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- Zhang, Z., et al. 2011. A novel BH3 mimetic S1 potently induces Bax/Bak-dependent apoptosis by targeting both Bcl-2 and Mcl-1. *Int. J. Cancer* 128: 1724-1735.
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- Song, T., et al. 2013. Pan-BH3 mimetic S1 exhibits broad-spectrum anti-tumour effects by cooperation between Bax and Bak. *Basic Clin. Pharmacol. Toxicol.* 113: 145-151.
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