

Bad (K-17): sc-942

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 and Bak, enhance cell death under various conditions. For instance, Bcl-x_L represses cell death, while its shorter form, Bcl-x_S, promotes apoptosis. A protein designated Bad exhibits homology to Bcl-2, limited to the BH1 and BH2 domains. Bad functions to dimerize with Bcl-x_L and with Bcl-2, but not with Bax, Bcl-x_S, Mcl-1, A1 or itself. In mammalian cells, Bad binds with greater affinity to Bcl-x_L than to Bcl-2, and reverses the death repressor activity of Bcl-x_L but not Bcl-2. Dimerization of Bad with Bcl-x_L results in displacement of Bax from Bcl-x_L:Bax complexes, thereby causing restoration of Bax-mediated apoptosis.

CHROMOSOMAL LOCATION

Genetic locus: Bad (mouse) mapping to 19 A.

SOURCE

Bad (K-17) is available as either rabbit (sc-942) or goat (sc-942-G) polyclonal affinity purified antibody raised against a peptide mapping near the N-terminus of Bad 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-942 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Bad (K-17) is recommended for detection of Bad of mouse and rat 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 Bad siRNA (m): sc-29779, Bad shRNA Plasmid (m): sc-29779-SH and Bad shRNA (m) Lentiviral Particles: sc-29779-V.

Molecular Weight of Bad: 25 kDa.

Positive Controls: mouse kidney extract: sc-2255, NIH/3T3 + serum-starved cell lysate: sc-2257 or mouse prostate extract: sc-364249.

STORAGE

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

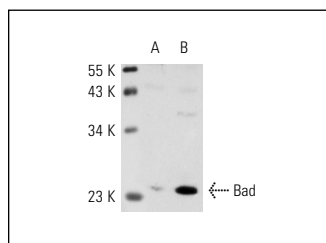
PROTOCOLS

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

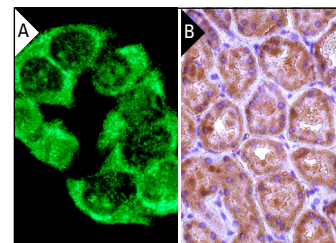
RESEARCH USE

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

DATA



Bad (K-17): sc-942. Western blot analysis of Bad expression in whole cell lysates prepared from control (A) and serum-starved (B) NIH/3T3 cells.



ICAD (K-17): sc-942. Immunofluorescence staining of methanol-fixed HeLa cells cytoplasmic staining (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining of cells in tubules (B).

SELECT PRODUCT CITATIONS

- del Peso, L., et al. 1997. Interleukin-3 induced phosphorylation of Bad through the protein kinase Akt. *Science* 278: 687-689.
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- Gravina, G.L., et al. 2015. Dual PI3K/mTOR inhibitor, XL765 (SAR245409), shows superior effects to sole PI3K [XL147 (SAR245408)] or mTOR [rapamycin] inhibition in prostate cancer cell models. *Tumour Biol.* E-published.

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