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Diagnostik & molekulare Diagnostik



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# Bad (h3): 293T Lysate: sc-170552

## 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<sub>L</sub> represses cell death, while its shorter form, Bcl-x<sub>S</sub>, 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<sub>L</sub> and with Bcl-2, but not with Bax, Bcl-x<sub>S</sub>, Mcl-1, A1 or itself. In mammalian cells, Bad binds with greater affinity to Bcl-x<sub>L</sub> than to Bcl-2 and reverses the death repressor activity of Bcl-x<sub>L</sub> but not Bcl-2. Dimerization of Bad with Bcl-x<sub>L</sub> results in displacement of Bax from Bcl-x<sub>L</sub>: Bax complexes thereby causing restoration of Bax-mediated apoptosis.

## REFERENCES

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## 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.

## CHROMOSOMAL LOCATION

Genetic locus: BAD (human) mapping to 11q13.1.

## PRODUCT

Bad (h3): 293T Lysate represents a lysate of human Bad transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

Bad (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive Bad antibodies. Recommended use: 10-20 µl per lane.

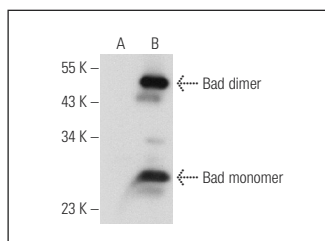
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Bad (C-7): sc-8044 is recommended as a positive control antibody for Western Blot analysis of enhanced human Bad expression in Bad transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA



Bad (C-7): sc-8044. Western blot analysis of Bad expression in non-transfected: sc-117752 (A) and human Bad transfected: sc-170552 (B) 293T whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.