

Bag-1 (C-20): sc-31682

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. Dimerization of another member of this family, Bad, with Bcl-x_L results in displacement of Bax from Bcl-x_L:Bax complexes and restoration of Bax-mediated apoptosis. A Bcl-2-binding protein, designated Bag-1, lacks significant homology with Bcl-2 or with other Bcl-2-related proteins. Bag-1 appears to function to enhance Bcl-2 protection from cell death, suggesting that Bag-1 represents a new type of anti-cell death gene and that certain routes of apoptosis induction previously ascribed to Bcl-2-independent pathways may instead reflect a requirement for a combination of Bcl-2 and Bag-1.

REFERENCES

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2. 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.
3. 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.
4. 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.
5. Chittenden, T., et al. 1995. Induction of apoptosis by the Bcl-2 homologue Bak. *Nature* 374: 733-736.
6. Kiefer, M.C., et al. 1995. Modulation of apoptosis by the widely distributed Bcl-2 homologue Bak. *Nature* 374: 736-739.
7. Takayama, S., et al. 1995. Cloning and functional analysis of Bag-1: a novel Bcl-2-binding protein with anti-cell death activity. *Cell* 80: 279-284.

CHROMOSOMAL LOCATION

Genetic locus: BAG1 (human) mapping to 9p13.3; Bag1 (mouse) mapping to 4 A5.

SOURCE

Bag-1 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Bag-1 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.

Blocking peptide available for competition studies, sc-31682 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Bag-1 (C-20) is recommended for detection of Bag-1 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).

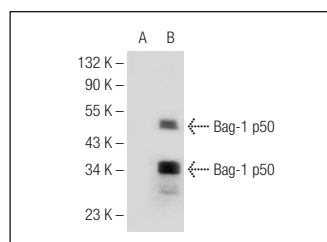
Bag-1 (C-20) is also recommended for detection of Bag-1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Bag-1 siRNA (h): sc-29211, Bag-1 siRNA (m): sc-29784, Bag-1 shRNA Plasmid (h): sc-29211-SH, Bag-1 shRNA Plasmid (m): sc-29784-SH, Bag-1 shRNA (h) Lentiviral Particles: sc-29211-V and Bag-1 shRNA (m) Lentiviral Particles: sc-29784-V.

Molecular Weight of the four major isoforms of Bag-1: 32/36/46/50 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211, HL-60 whole cell lysate: sc-2209 or Bag-1 (h): 293T Lysate: sc-112723.

DATA



Bag-1 (C-20): sc-31682. Western blot analysis of Bag-1 expression in non-transfected: sc-117752 (A) and human Bag-1 transfected: sc-112723 (B) 293T whole cell lysates.

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.



Try **Bag-1 (E-11): sc-376848** or **Bag-1 (CC9E8): sc-33704**, our highly recommended monoclonal alternatives to Bag-1 (C-20).