

# Bag-1 (C-16): sc-939

## 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. Dimerization of another member of this family, Bad, with Bcl-x<sub>L</sub>, results in displacement of Bax from Bcl-x<sub>L</sub>/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. This also suggests 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

Bag-1 (C-16) is available as either rabbit (sc-939) or goat (sc-939-G) polyclonal affinity purified antibody raised against a peptide mapping at the C-terminus of Bag-1 of mouse origin.

## PRODUCT

Each vial contains either 100 µg (sc-939) or 200 µg (sc-939-G) IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-939 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Bag-1 (C-16) is recommended for detection of Bag-1 p32, p36 and p50 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), 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).

Bag-1 (C-16) is also recommended for detection of Bag-1 in additional species, including equine, canine and bovine.

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 Bag-1 four major isoforms: 32/36/46/50 kDa.

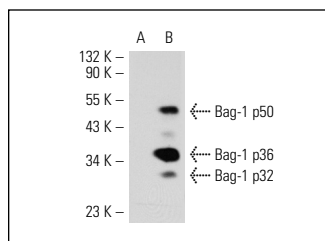
## STORAGE

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

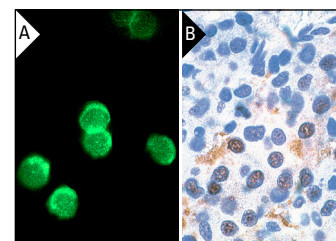
## RESEARCH USE

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

## DATA



Bag-1 (C-16): sc-939. 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.



Bag-1 (C-16): sc-939. Immunofluorescence staining of methanol-fixed HL-60 cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin-fixed, paraffin-embedded human liver carcinoma tissue showing nuclear localization (B).

## SELECT PRODUCT CITATIONS

- Luders, J., et al. 2000. The Ubiquitin-related BAG-1 provides a link between the molecular chaperones Hsc70/Hsp70 and the proteasome. *J. Biol. Chem.* 275: 4613-4617.
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- Hong, W., et al. 2009. Bag-1M inhibits the transactivation of the glucocorticoid receptor via recruitment of corepressors. *FEBS Lett.* 583: 2451-2456.
- Corduan, A., et al. 2009. Sequential interplay between BAG6 and HSP70 upon heat shock. *Cell. Mol. Life Sci.* 66: 1998-2004.
- Elliott, E. and Ginzburg, I. 2009. BAG-1 is preferentially expressed in neuronal precursor cells of the adult mouse brain and regulates their proliferation *in vitro*. *FEBS Lett.* 583: 229-234.
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- Zheng, H.C., et al. 2010. Nuclear or cytoplasmic localization of Bag-1 distinctly correlates with pathologic behavior and outcome of gastric carcinomas. *Hum. Pathol.* 41: 724-736.
- Southern, S.L., et al. 2012. BAG-1 interacts with the p50-p50 homodimeric NF $\kappa$ B complex: implications for colorectal carcinogenesis. *Oncogene* 31: 2761-2772.

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Try **Bag-1 (E-11): sc-376848** or **Bag-1 (CC9E8): sc-33704**, our highly recommended monoclonal alternatives to Bag-1 (C-16).