

Bag-1 (FL-274): sc-8348

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

1. Nunez, G., et al. 1990. Deregulated Bcl-2 gene expression selectively prolongs survival of growth factor-deprived hemopoietic cell lines. *J. Immunol.* 144: 3602-3610.
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.

CHROMOSOMAL LOCATION

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

SOURCE

Bag-1 (FL-274) is a rabbit polyclonal antibody raised against amino acids 73-274 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.

APPLICATIONS

Bag-1 (FL-274) 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Bag-1 (FL-274) is also recommended for detection of Bag-1 p32, p36 and p50 in additional species, including equine, canine, bovine and porcine.

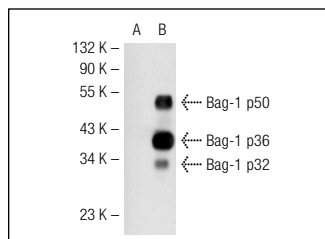
Suitable for use as control antibody for Bag-1 siRNA (h): sc-29211, Bag-1 siRNA (m): sc-29784, Bag-1 shRNA Plasmid (h): sc-29211-SH, Bag-1 shRNA Plasmid (m): sc-29784-SH, Bag-1 shRNA (h) Lentiviral Particles: sc-29211-V and Bag-1 shRNA (m) Lentiviral Particles: sc-29784-V.

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

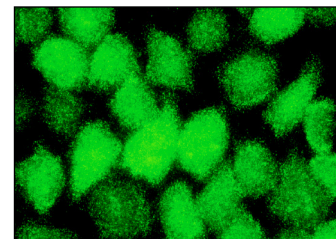
STORAGE

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

DATA



Bag-1 (FL-274): sc-8348. 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 (FL-274): sc-8348. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and nuclear localization.

SELECT PRODUCT CITATIONS

1. Eichholtz-Wirth, H., et al. 2003. Overexpression of the "silencer of death domain", SODD/Bag-4, modulates both TNFR1- and CD95-dependent cell death pathways. *Cancer Lett.* 194: 81-89.
2. Perkins, D., et al. 2003. The herpes simplex virus type 2 R1 protein kinase (ICP10 PK) functions as a dominant regulator of apoptosis in hippocampal neurons involving activation of the ERK survival pathway and upregulation of the antiapoptotic protein Bag-1. *J. Virol.* 77: 1292-1305.
3. Ruchalski, K., et al. 2006. Distinct hsp70 domains mediate apoptosis-inducing factor release and nuclear accumulation. *J. Biol. Chem.* 281: 7873-7880.
4. Matsui, H., et al. 2007. Cytokines direct the regulation of Bim mRNA stability by heat-shock cognate protein 70. *Mol. Cell* 25: 99-112.
5. Hong, W., et al. 2008. Bag-1M is a component of the *in vivo* DNA-glucocorticoid receptor complex at hormone-regulated promoter. *J. Mol. Biol.* 384: 22-30.
6. Hong, W., et al. 2009. ATP hydrolysis is essential for Bag-1M-mediated inhibition of the DNA binding by the glucocorticoid receptor. *Biochem. Biophys. Res. Commun.* 390: 77-81.
7. Hong, W., et al. 2009. Bag-1M inhibits the transactivation of the glucocorticoid receptor via recruitment of corepressors. *FEBS Lett.* 583: 2451-2456.

RESEARCH USE

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

MONOS
Satisfaction
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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 (FL-274).