

Bag-1 (19): sc-135844

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. 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.

REFERENCES

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- Ishioka, S., Ezaka, Y., Umemura, K., Hayashi, T., Endo, T. and Saito, T. 2006. Proteomic analysis of mechanisms of hypoxia-induced apoptosis in trophoblastic cells. *Int. J. Med. Sci.* 4: 36-44.

STORAGE

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

CHROMOSOMAL LOCATION

Genetic locus: BAG1 (human) mapping to 9p13.3.

SOURCE

Bag-1 (19) is a mouse monoclonal antibody raised against amino acids 155-258 of Bag-1 of human origin.

PRODUCT

Each vial contains 50 µg IgG₁ in 0.5 ml of PBS with < 0.1% sodium azide, 0.1% gelatin, 20% glycerol and 0.04% stabilizer protein.

APPLICATIONS

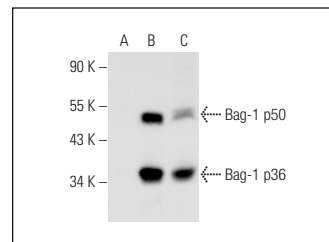
Bag-1 (19) is recommended for detection of Bag-1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

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

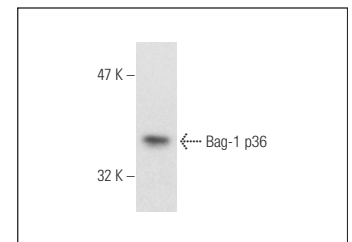
Molecular Weight of Bag-1 four major isoforms: 32/36/46/50 kDa.

Positive Controls: Bag-1 (h): 293T Lysate: sc-112723, HeLa whole cell lysate: sc-2200 or LNCaP cell lysate: sc-2231.

DATA



Bag-1 (19): sc-135844. Western blot analysis of Bag-1 expression in non-transfected 293T: sc-117752 (A), human Bag-1 transfected 293T: sc-112723 (B) and HL-60 (C) whole cell lysates.



Bag-1 (19): sc-135844. Western blot analysis of Bag-1 expression in MCF7 whole cell lysate.

SELECT PRODUCT CITATIONS

- Rasheed, Z. and Haqqi, T.M. 2012. Endoplasmic reticulum stress induces the expression of COX-2 through activation of eIF2α, p38-MAPK and NF-κB in advanced glycation end products stimulated human chondrocytes. *Biochim. Biophys. Acta* 1823: 2179-2189.

RESEARCH USE

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

PROTOCOLS

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