

Bag-3 (P-17): sc-68954

BACKGROUND

The Bag family of proteins are characterized by the presence of a 45 amino acid Bag domain through which they bind with high affinity to the ATPase domain of HSP 70, thereby negatively regulating HSP 70 chaperone activity. Bag-3 (Bcl-2-associated athanogene 3), also known as BIS or CAIR-1, is a 575 amino acid protein that contains one C-terminal Bag domain and two N-terminal WW domains. Like other members of the Bag family, Bag-3 functions to inhibit the chaperone activity of HSP 70, specifically by promoting the release of HSP 70-bound substrates. Additionally, Bag-3 exhibits anti-apoptotic activity via cell cycle control, suggesting a possible role for Bag-3 in tumor progression. The gene encoding Bag-3 maps to human chromosome 10, which houses over 1,200 genes and comprises nearly 4.5% of the human genome.

REFERENCES

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3. Iwasaki, M., et al. 2007. Bag-3 regulates motility and adhesion of epithelial cancer cells. *Cancer Res.* 67: 10252-10259.
4. Chiappetta, G., et al. 2007. The antiapoptotic protein Bag-3 is expressed in thyroid carcinomas and modulates apoptosis mediated by tumor necrosis factor-related apoptosis-inducing ligand. *J. Clin. Endocrinol. Metab.* 92: 1159-1163.
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8. Franceschelli, S., et al. 2008. Bag-3 gene expression is regulated by heat shock factor 1. *J. Cell. Physiol.* 215: 575-577.
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CHROMOSOMAL LOCATION

Genetic locus: BAG3 (human) mapping to 10q26.11; Bag3 (mouse) mapping to 7 F3.

SOURCE

Bag-3 (P-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Bag-3 of human origin.

RESEARCH USE

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

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-68954 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Bag-3 (P-17) is recommended for detection of Bag-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Suitable for use as control antibody for Bag-3 siRNA (h): sc-72602, Bag-3 siRNA (m): sc-72603, Bag-3 shRNA Plasmid (h): sc-72602-SH, Bag-3 shRNA Plasmid (m): sc-72603-SH, Bag-3 shRNA (h) Lentiviral Particles: sc-72602-V and Bag-3 shRNA (m) Lentiviral Particles: sc-72603-V.

Molecular Weight of Bag-3: 80 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

PROTOCOLS

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



Try **Bag-3 (19): sc-136467**, our highly recommended monoclonal alternative to Bag-3 (P-17).