

# Bag-1 (K-20): sc-31680

## 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 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

Bag-1 (K-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region 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-31680 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

Bag-1 (K-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 (K-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.

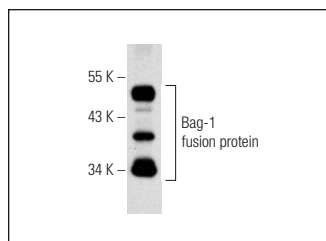
Molecular Weight of the four major isoforms of Bag-1: 32/36/46/50 kDa.

Positive Controls: mouse testis extract: sc-2405 or HL-60 whole cell lysate: sc-2209.

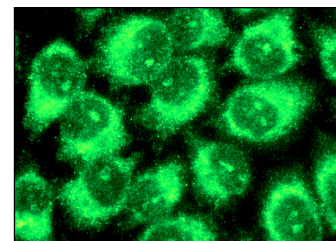
## RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



Bag-1 (K-20): sc-31680. Western blot analysis of human recombinant Bag-1 fusion protein.



Bag-1 (K-20): sc-31680. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

**MONOS**  
Satisfaction  
Guaranteed

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