# Bag-2 (E-20): sc-68949



The Power to Question

## **BACKGROUND**

Bag-2 (Bcl-2-associated athanogene 2), also known as Bag family molecular chaperone regulator 2, is a member of the Bag family of proteins and contains the most diverged of the characteristic C-terminal Bag domain. Via their Bag domain, Bag proteins bind with high affinity to the HSC 70/HSP 70 ATPase domain, regulating chaperone activity and apoptosis. Bag-2 is an evolutionarily conserved cytoplasmic protein with putative N-terminal phosphorylation sites and specifically functions as an HSC 70 co-chaperone. Bag-2 is a major component of the HSC 70/CHIP chaperone-dependent ubiquitin ligase complex and acts to disrupt CHIP-mediated ubiquitylation. In this complex, Bag-2 directly interacts with the ATPase domain of HSC 70 as well as the U-box domain of CHIP and inhibits ubiquitylation by interfering with the association between CHIP and its ubiquitin conjugating enzyme.

## **REFERENCES**

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## **CHROMOSOMAL LOCATION**

Genetic locus: BAG2 (human) mapping to 6p11.2; Bag2 (mouse) mapping to 1 B.

# SOURCE

Bag-2 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Bag-2 of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-68949 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

Bag-2 (E-20) is recommended for detection of Bag-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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-2 (E-20) is also recommended for detection of Bag-2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Bag-2 siRNA (h): sc-72600, Bag-2 siRNA (m): sc-72601, Bag-2 shRNA Plasmid (h): sc-72600-SH, Bag-2 shRNA Plasmid (m): sc-72601-SH, Bag-2 shRNA (h) Lentiviral Particles: sc-72600-V and Bag-2 shRNA (m) Lentiviral Particles: sc-72601-V.

Molecular Weight of Bag-2: 26 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

# **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.

## **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.



Try **Bag-2 (C-6)**: **sc-390107** or **Bag-2 (A-7)**: **sc-390262**, our highly recommended monoclonal alternatives to Bag-2 (E-20).

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