SANTA CRUZ BIOTECHNOLOGY, INC.

Bag-5 (N-19): sc-68959

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The Power to Question

BACKGROUND

Bag-5 (Bcl-2-associated athanogene 5), also known as Bag family molecular chaperone regulator 5, is a member of the Bag family of proteins and contains four Bag domains. Via their Bag domain, Bag proteins bind with high affinity to the HSC 70/HSP 70 ATPase domain, regulating chaperone activity and apoptosis. Bag-5 is a component of the HSP 70/Parkin complex and acts to inhibit Parkin E3 ubiquitin ligase activity and HSP 70 chaperone activity. In this complex, Bag-5 directly interacts with the ATPase domain of HSP 70 and the N-terminal linker region of Parkin. Bag-5 expression is induced upon dopaminergic neuron injury and functions to sensitize the neurons to injury-induced cell death. In addition, Bag-5 may be a useful target in therapies for neurodegenerative diseases such as Parkinson's disease which is caused by a mutation in the gene encoding Parkin.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: BAG5 (human) mapping to 14q32.33; Bag5 (mouse) mapping to 12 F1.

SOURCE

Bag-5 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Bag-5 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-68959 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Bag-5 (N-19) is recommended for detection of Bag-5 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).

Bag-5 (N-19) is also recommended for detection of Bag-5 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Bag-5 siRNA (h): sc-72604, Bag-5 siRNA (m): sc-72605, Bag-5 shRNA Plasmid (h): sc-72604-SH, Bag-5 shRNA Plasmid (m): sc-72605-SH, Bag-5 shRNA (h) Lentiviral Particles: sc-72604-V and Bag-5 shRNA (m) Lentiviral Particles: sc-72605-V.

Molecular Weight of Bag-5: 51 kDa.

Positive Controls: 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) 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.

PROTOCOLS

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