

HspBP1 (S-19): sc-34255

BACKGROUND

Hsp70-interacting protein (HspBP1) belongs to a family of eukaryotic proteins identified as nucleotide exchange factors for Hsp70, which exhibit varying degrees of compartment and species specificity. HspBP1 interferes with the CHIP-induced degradation of immature forms of the cystic fibrosis transmembrane conductance regulator (CFTR) and stimulates CFTR maturation. HspBP1 binds to Hsp70, inhibits its activity and promotes dissociation of nucleotides from the Hsp70 ATPase domain. It is a protein mainly expressed in heart and skeletal muscle.

REFERENCES

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3. McLellan, C.A., et al. 2003. HspBP1, an HSP 70 cochaperone, has two structural domains and is capable of altering the conformation of the HSP 70 ATPase domain. *J. Biol. Chem.* 278: 19017-19022.
4. Raynes, D.A., et al. 2003. Increased expression of the HSP 70 cochaperone HspBP1 in tumors. *Tumour Biol.* 24: 281-285.
5. Tanimura, S., et al. 2004. Heat shock protein 70 binding protein 1 induces enhanced apoptotic response against anticancer drugs in tumor cells. *Nippon Rinsho* 62: 1291-1296.
6. Alberti, S., et al. 2004. The cochaperone HspBP1 inhibits the CHIP ubiquitin ligase and stimulates the maturation of the cystic fibrosis transmembrane conductance regulator. *Mol. Biol. Cell* 15: 4003-4010.
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CHROMOSOMAL LOCATION

Genetic locus: HSPBP1 (human) mapping to 19q13.42; Hspbp1 (mouse) mapping to 7 A1.

SOURCE

HspBP1 (S-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of HspBP1 of human origin.

STORAGE

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

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-34255 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HspBP1 (S-19) is recommended for detection of HspBP1 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).

HspBP1 (S-19) is also recommended for detection of HspBP1 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for HspBP1 siRNA (h): sc-45314, HspBP1 siRNA (m): sc-45315, HspBP1 shRNA Plasmid (h): sc-45314-SH, HspBP1 shRNA Plasmid (m): sc-45315-SH, HspBP1 shRNA (h) Lentiviral Particles: sc-45314-V and HspBP1 shRNA (m) Lentiviral Particles: sc-45315-V.

Molecular Weight of HspBP1: 45 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

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.

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.