SANTA CRUZ BIOTECHNOLOGY, INC.

HSP 75 (B-23): sc-133678



BACKGROUND

The heat shock proteins (HSPs) comprise a group of highly conserved, abundantly expressed proteins with diverse functions, including the assembly and sequestering of multiprotein complexes, transportation of nascent polypeptide chains across cellular membranes and regulation of protein folding. Heat shock protein 75 mitochondrial precursor (HSP 75), also called tumor necrosis factor type 1 receptor-associated protein (TRAP1), is a 704 amino acid member of the heat shock protein 90 family. HSP 75 localizes to the mitochondrion and is expressed in a variety of tissues, including skeletal muscle, liver, heart, brain, pancreas, lung and placenta, functioning as a chaperone that expresses an ATPase activity.

REFERENCES

- Heinen, R.C., Diniz-Mendes, L., Silva, J.T. and Paschoalin, V.M. 2006. Identification of the divergent calmodulin binding motif in yeast Ssb1/HSP 75 protein and in other HSP 70 family members. Braz. J. Med. Biol. Res. 39: 1399-1408.
- Blank, M., Bastrop, R. and Jürss, K. 2006. Stress protein response in two sibling species of *Marenzelleria (Polychaeta: Spionidae):* is there an influence of acclimation salinity? Comp. Biochem. Physiol. B, Biochem. Mol. Biol. 144: 451-462.

CHROMOSOMAL LOCATION

Genetic locus: TRAP1 (human) mapping to 16p13.3.

SOURCE

HSP 75 (B-23) is a protein A purified rabbit polyclonal antibody raised against synthetic HSP 75 peptide of human origin.

PRODUCT

Each vial contains 100 μg lgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

HSP 75 (B-23) is recommended for detection of HSP 75 of 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), immunohistochemistry (including paraffin-embedded sections) (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 HSP 75 siRNA (h): sc-72191, HSP 75 shRNA Plasmid (h): sc-72191-SH and HSP 75 shRNA (h) Lentiviral Particles: sc-72191-V.

Molecular Weight of HSP 75: 75 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, SJRH30 cell lysate: sc-2287 or MIA PaCa-2 cell lysate: sc-2285.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-2018 rabbit IgG Staining Systems.

DATA





HSP 75 (B-23): sc-133678. Western blot analysis of HSP 75 expression in Hep G2 whole cell lysate.

HSP 75 (B-23): sc-133678. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human kidney tissue showing cytoplasmic localization.

STORAGE

Store at 4° C, **D0 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.

MONOS Satisfation Guaranteed

Try HSP 75 (F-7): sc-390061 or HSP 75 (30): sc-136421, our highly recommended monoclonal alternatives to HSP 75 (B-23).