SANTA CRUZ BIOTECHNOLOGY, INC.

HSPB9 (Q-16): sc-164619

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The Power to Question

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. Also referred to as molecular chaperones, heat shock proteins fall into six general families: HSP 90, HSP 70, HSP 60, the small molecular weight HSPs (like HSP 20), the immunophilins and the HSP 110 family. HSPB9 (heat shock protein β-9), also known as CT51 (cancer/testis antigen 51), is a 159 amino acid protein that belongs to the small heat shock protein (HSP20) family. Localizing to the cytoplasm as well as the nucleus, HSPB9 is expressed specifically in the testis. The gene encoding HSPB9 maps to human chromosome 17q21.2.

REFERENCES

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3. Heinen, R.C., et al. 2006. Identification of the divergent calmodulin binding motif in yeast Ssb1/Hsp75 protein and in other HSP70 family members. Braz. J. Med. Biol. Res. 39: 1399-1408.
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5. Tokalov, S.V., et al. 2007. Varying responses of human cells with discrepant p53 activity to ionizing radiation and heat shock exposure. Cell Prolif. 40: 24-37.
6. Im, C.N., et al. 2007. Iron chelation study in a normal human hepatocyte cell line suggests that tumor necrosis factor receptor-associated protein 1 (TRAP1) regulates production of reactive oxygen species. J. Cell. Biochem. 100: 474-486.
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OCATION

Genetic locus: Hspb9 (mouse) mapping to 11 D.

SOURCE

HSPB9 (Q-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HSPB9 of mouse 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-164619 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HSPB9 (Q-16) is recommended for detection of HSPB9 of mouse and rat 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); non cross-reactive with other HSPB family members.

Suitable for use as control antibody for HSPB9 siRNA (m): sc-146103, HSPB9 shRNA Plasmid (m): sc-146103-SH and HSPB9 shRNA (m) Lentiviral Particles: sc-146103-V.

Molecular Weight of HSPB9: 17 kDa.

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.