# SANTA CRUZ BIOTECHNOLOGY, INC.

# HSPB9 (C-16): sc-164616



# 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  $\beta$ -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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# CHROMOSOMAL LOCATION

Genetic locus: HSPB9 (human) mapping to 17q21.2.

# SOURCE

HSPB9 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of HSPB9 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  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-164616 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

HSPB9 (C-16) is recommended for detection of HSPB9 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) 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 (h): sc-93978, HSPB9 shRNA Plasmid (h): sc-93978-SH and HSPB9 shRNA (h) Lentiviral Particles: sc-93978-V.

Molecular Weight of HSPB9: 17 kDa.

Positive Controls: human testis extract: sc-363781.

# **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.

## DATA



HSPB9 (C-16): sc-164616. Western blot analysis HSPB9 expression in human testis tissue extract.

#### **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.