

HSPB2 (D-14): sc-109284

BACKGROUND

The heat shock proteins (HSPs) comprise a group of highly conserved, abundantly expressed proteins with diverse functions, including the assembly and sequestering of multi-protein complexes, transportation of nascent polypeptide chains across cellular membranes and regulation of protein folding. HSPB2 (heat shock 27 kDa protein 2), also known as HSP 27 or MKBP, is a 182 amino acid protein that belongs to the heat shock protein family and is expressed preferentially in heart and skeletal muscle. Localized to mitochondria, HSPB2 functions as an ATP-dependent chaperone protein that plays a role in the refolding of denatured proteins and may also interact with the Actin cytoskeleton and prevent apoptotic cell death. HSPB2 is abundantly expressed in several cancer cell lines, suggesting that HSPB2 may be an important factor in tumor transformation and metastasis.

REFERENCES

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8. Kato, H., et al. 2008. HSP27 phosphorylation is correlated with ADP-induced platelet granule secretion. *Arch. Biochem. Biophys.* 475: 80-86.
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CHROMOSOMAL LOCATION

Genetic locus: HSPB2 (human) mapping to 11q23.1; Hspb2 (mouse) mapping to 9 A5.3.

SOURCE

HSPB2 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HSPB2 of human origin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-109284 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HSPB2 (D-14) is recommended for detection of HSPB2 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).

HSPB2 (D-14) is also recommended for detection of HSPB2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for HSPB2 siRNA (h): sc-96438, HSPB2 siRNA (m): sc-146101, HSPB2 shRNA Plasmid (h): sc-96438-SH, HSPB2 shRNA Plasmid (m): sc-146101-SH, HSPB2 shRNA (h) Lentiviral Particles: sc-96438-V and HSPB2 shRNA (m) Lentiviral Particles: sc-146101-V.

Molecular Weight (predicted) of HSPB2: 20 kDa.

Molecular Weight (observed) of HSPB2: 24 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.

STORAGE

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

PROTOCOLS

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



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Try **HSPB2 (6): sc-136339** or **HSPB2 (F-9): sc-514154**, our highly recommended monoclonal alternatives to HSPB2 (D-14).