

HSP 10 (49): sc-136369

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 poly-peptide chains across cellular membranes and regulation of protein folding. Heat shock proteins (also known as molecular chaperones) fall into six general families: HSP 90, HSP 70, HSP 60, the low molecular weight HSPs, the immunophilins and the HSP 110 family. The low molecular weight family includes HSP 10, HSP 20, HSP 27, HSP 32 and HSP 40. HSP 10, a 102 amino acid protein, forms a heptameric ring of 7 identical subunits. This ring binds at either end of HSP 60 to form a functional heterodimer.

REFERENCES

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- Todd, M.J., et al. 1994. Dynamics of the chaperonin ATPase cycle: implications for facilitated protein folding. *Science* 265: 659-666.
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CHROMOSOMAL LOCATION

Genetic locus: TOB1 (human) mapping to 17q21.33; Tob1 (mouse) mapping to 11 D.

SOURCE

HSP 10 (49) is a mouse monoclonal antibody raised against amino acids 5-102 of HSP 10 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

HSP 10 (49) is recommended for detection of HSP 10 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

Suitable for use as control antibody for HSP 10 siRNA (h): sc-40654, HSP 10 siRNA (m): sc-40655, HSP 10 shRNA Plasmid (h): sc-40654-SH, HSP 10 shRNA Plasmid (m): sc-40655-SH, HSP 10 shRNA (h) Lentiviral Particles: sc-40654-V and HSP 10 shRNA (m) Lentiviral Particles: sc-40655-V.

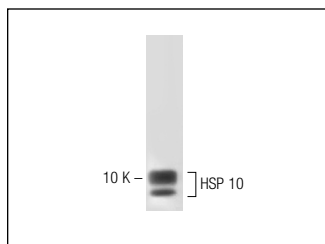
Molecular Weight of HSP 10: 10 kDa.

Positive Controls: rat kidney extract: sc-2394.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



HSP 10 (49): sc-136369. Western blot analysis of HSP 10 expression in rat kidney tissue extract.

STORAGE

Store at 4° C, ****DO 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 for detailed protocols and support products.