

HSP 60 (A57-E4): sc-57841

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 the regulation of protein folding. HSPs (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 constitutively expressed mitochondrial protein HSP 60 shares the ability to recognize and stabilize proteins during folding, assembly and disassembly with other HSP family members. The mitochondrial and cytosolic localization of HSP 60, combined with its binding and catalysis of folding of newly synthesized proteins destined for the mitochondrial matrix, classify this protein as a molecular chaperone. An additional role of HSP 60 is to act as a cell surface marker for γ/δ T cell recognition.

REFERENCES

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4. Schlesinger, M.J., Ashburner, M. and Tissieres, A. 1982. Heat Shock: from Bacteria to Man. Cold Spring Harbor, N.Y.: Cold Spring Harbor Laboratory
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SOURCE

HSP 60 (A57-E4) is a mouse monoclonal antibody raised against recombinant serovar A HSP 60 of *Chlamydia trachomatis* origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

HSP 60 (A57-E4) is recommended for detection of an internal region corresponding to amino acids 101-200 of HSP 60 of *C. trachomatis* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000); also recommended for detection of HSP 60 of *C. psittaci*, *E. coli*, *S. typhimurium*, *N. gonorrhoeae*, *C. burnetii*.

Molecular Weight of HSP 60: 60 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

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.



See **HSP 60 (LK1): sc-59567** for HSP 60 antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647.