

HSP 105 (M-20): sc-1804

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. 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 HSP 110 family (also known as the HSP 105 family) is composed of HSP 105, Apg-1 and Apg-2. HSP 105 is a testis-specific and HSP 90-related protein. Research indicates that HSP 105 is specifically localized in the germ cells and may translocate into the nucleus after heat shock. It is suggested that HSP 105 may contribute to the stabilization of p53 proteins in the cytoplasm of the germ cells, preventing the potential induction of apoptosis by p53.

CHROMOSOMAL LOCATION

Genetic locus: HSPH1 (human) mapping to 13q12.3; Hsp105 (mouse) mapping to 5 G3.

SOURCE

HSP 105 (M-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of HSP 105 of mouse origin.

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-1804 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

HSP 105 (M-20) is recommended for detection of HSP 105 of mouse, rat and 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).

Suitable for use as control antibody for HSP 105 siRNA (h): sc-35597, HSP 105 siRNA (m): sc-35596, HSP 105 shRNA Plasmid (h): sc-35597-SH, HSP 105 shRNA Plasmid (m): sc-35596-SH, HSP 105 shRNA (h) Lentiviral Particles: sc-35597-V and HSP 105 shRNA (m) Lentiviral Particles: sc-35596-V.

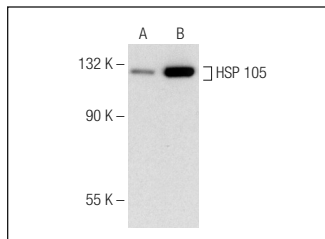
Molecular Weight of HSP 105: 105 kDa.

Positive Controls: HSP 105 (h): 293T Lysate: sc-114818, HeLa whole cell lysate: sc-2200 or C6 whole cell lysate: sc-364373.

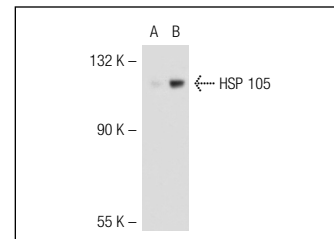
RECOMMENDED SECONDARY REAGENTS

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



HSP 105 (M-20): sc-1804. Western blot analysis of HSP 105 expression in untreated (A) and Lactacystin (sc-3575) treated (B) C6 whole cell lysates. Note upregulation of HSP 105 expression in lane B.



HSP 105 (M-20): sc-1804. Western blot analysis of HSP 105 expression in non-transfected: sc-117752 (A) and human HSP 105 transfected: sc-114818 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Bossenmeyer-Pourié, C., et al. 2002. Sequential expression patterns of apoptosis- and cell cycle-related proteins in neuronal response to severe or mild transient hypoxia. *Neuroscience* 114: 869-882.
- Eroglu, B., et al. 2010. Loss of Hsp110 leads to age-dependent tau hyperphosphorylation and early accumulation of insoluble amyloid β. *Mol. Cell. Biol.* 30: 4626-4643.

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.



Try **HSP 105 (B-7): sc-74550** or **HSP 105 (21): sc-135942**, our highly recommended monoclonal alternatives to HSP 105 (M-20).