

HSP 10 (C-20): sc-21375

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 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 seven identical subunits. This ring binds at either end of HSP 60 to form a functional heterodimer.

CHROMOSOMAL LOCATION

Genetic locus: HSPE1 (human) mapping to 2q33.1; Hspe1 (mouse) mapping to 1 C1.2.

SOURCE

HSP 10 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of HSP 10 of human 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-21375 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.

RESEARCH USE

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

APPLICATION

HSP 10 (C-20) 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), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

HSP 10 (C-20) is also recommended for detection of HSP 10 in additional species, including equine, canine, bovine, porcine and avian.

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: LADMAC whole cell lysate: sc-364189 or MES-SA/Dx5 cell lysate: sc-2284.

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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



HSP 10 (C-20): sc-21375. Immunoperoxidase staining of formalin fixed, paraffin-embedded human premenopausal uterus tissue showing granular cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

- Gu, S., et al. 2004. Global investigation of p53-induced apoptosis through quantitative proteomic profiling using comparative amino acid-coded tagging. *Mol. Cell. Proteomics* 3: 998-1008.

PROTOCOLS

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


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Try **HSP 10 (D-8): sc-376313** or **HSP 10 (49): sc-136369**, our highly recommended monoclonal alternatives to HSP 10 (C-20).