

HSPA12B (G-16): sc-85598

BACKGROUND

Heat shock proteins (HSPs) are associated with stress responses and are abundant in cells. HSP 70 is the largest family of HSPs that function as molecular chaperones. HSP 70s are involved in many processes including protein synthesis, folding, assembly, trafficking between cellular compartments and degradation. HSPA12B (heat shock 70 kDa protein 12B) is a 686 amino acid protein that is abundantly expressed in the endothelial cells of muscle and heart, and is also expressed in liver and kidney. HSPA12B belongs to the heat shock protein 70 family because it contains a heat shock protein 70 (HSP 70) ATPase domain. HSPA12B is thought to be involved in angiogenesis, and as such is involved in stress signaling responses concerning wounds. HSPA12B is upregulated in atherosclerotic lesions, which suggests involvement in atherogenesis. However, increased expression of HSPA12B also increases HSP 70 concentrations, suggesting that HSPA12B could be involved in an attempt to protect cells from atherosclerotic damage.

CHROMOSOMAL LOCATION

Genetic locus: HSPA12B (human) mapping to 20p13; Hspa12b (mouse) mapping to 2 F1.

SOURCE

HSPA12B (G-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HSPA12B 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-85598 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HSPA12B (G-16) is recommended for detection of HSPA12B 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).

HSPA12B (G-16) is also recommended for detection of HSPA12B in additional species, including equine and canine.

Suitable for use as control antibody for HSPA12B siRNA (h): sc-75310, HSPA12B siRNA (m): sc-146096, HSPA12B shRNA Plasmid (h): sc-75310-SH, HSPA12B shRNA Plasmid (m): sc-146096-SH, HSPA12B shRNA (h) Lentiviral Particles: sc-75310-V and HSPA12B shRNA (m) Lentiviral Particles: sc-146096-V.

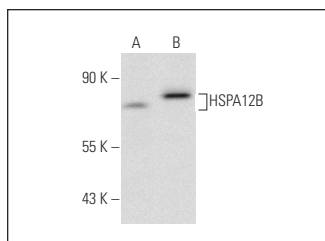
Molecular Weight of HSPA12B: 76 kDa.

Positive Controls: HSPA12B (h): 293T Lysate: sc-112052 or WI-38 whole cell lysate: sc-364260.

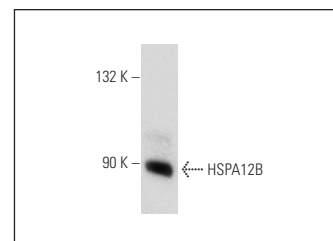
RECOMMENDED SECONDARY REAGENTS

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



HSPA12B (G-16): sc-85598. Western blot analysis of HSPA12B expression in non-transfected: sc-117752 (A) and human HSPA12B transfected: sc-112052 (B) 293T whole cell lysates.



HSPA12B (G-16): sc-85598. Western blot analysis of HSPA12B expression in WI 38 whole cell lysate.

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 or our catalog for detailed protocols and support products.



Try **HSPA12B (C-4): sc-393635** or **HSPA12B (A-12): sc-376020**, our highly recommended monoclonal alternatives to HSPA12B (G-16).