

PSMC2 (H-102): sc-98691

BACKGROUND

In eukaryotic cells, selective breakdown of cellular proteins is ensured by their ubiquitination and subsequent degradation by the 26S Proteasome. The 26S Proteasome is a protease complex that selectively breaks down proteins that have been modified by polyubiquitin chains. It is made up of two multisubunit complexes: the 20S Proteasome chamber, which serves as the proteolytic core of the complex, and two 19S regulatory particles, which recognize and unfold ubiquitinated proteins. PSMC2 (Proteasome 26S subunit ATPase 2), also known as S7 or MSS1, is a 433 amino acid member of the AAA ATPase family. Localized to both the nucleus and the cytoplasm, PSMC2 functions as a chaperone-like subunit of the 19S regulatory complex where it participates in proteasome events throughout the cell. Additionally, PSMC2 is thought to interact with several basal transcription factors and, via this interaction, may play a role in transcriptional regulation. In response to HIV-1 infection, PSMC2 can positively modulate HIV-1 Tat-mediated transactivation, thereby mediating the interaction between the transcription complex and the viral protein.

CHROMOSOMAL LOCATION

Genetic locus: PSMC2 (human) mapping to 7q22.1; Psmc2 (mouse) mapping to 5 A3.

SOURCE

PSMC2 (H-102) is a rabbit polyclonal antibody raised against amino acids 29-122 mapping near the N-terminus of PSMC2 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.

STORAGE

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

APPLICATIONS

PSMC2 (H-102) is recommended for detection of PSMC2 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).

PSMC2 (H-102) is also recommended for detection of PSMC2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for PSMC2 siRNA (h): sc-76273, PSMC2 siRNA (m): sc-76274, PSMC2 shRNA Plasmid (h): sc-76273-SH, PSMC2 shRNA Plasmid (m): sc-76274-SH, PSMC2 shRNA (h) Lentiviral Particles: sc-76273-V and PSMC2 shRNA (m) Lentiviral Particles: sc-76274-V.

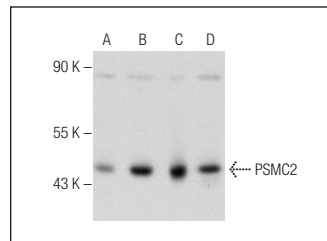
Molecular Weight of PSMC2: 49 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, SW-13 cell lysate: sc-24778 or MCF7 whole cell lysate: sc-2206.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



PSMC2 (H-102): sc-98691. Western blot analysis of PSMC2 expression in HeLa (A), Jurkat (B), SW-13 (C) and MCF7 (D) whole cell lysates.

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.


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Try **PSMC2 (C-1): sc-166972**, our highly recommended monoclonal alternative to PSMC2 (H-102).