

PSMC4 (C-13): sc-46465

BACKGROUND

In eukaryotic cells, selective breakdown of cellular proteins is ensured by their ubiquitination and subsequent degradation by the 26S proteasome. At specific stages of development, embryo- and tissue-specific components of the 26S proteasome are formed, which are responsible for proteolysis. These components of the 26S proteasome include Rpn10 α through Rpn10 ϵ , or, alternatively, pUb-R2 through pUb-R5, and can be generated by a single Rpn10 gene by developmentally regulated alternative splicing. Gankyrin and p44S10 are proteasome regulatory particles that are expressed in heart, liver, skeletal muscle and pancreas. Proteasome component C₂ (PROS-30), also designated Macropain subunit C₂, is a prosomal protein involved in a non-lysosomal atp/ubiquitin-dependent proteolytic pathway. PSMC4 (26S protease regulatory subunit 6B) is involved in the ATP-dependent degradation of ubiquitinated proteins. PSMC4 interacts with gankyrin, a liver oncoprotein as well as with a liver-specific member of the nuclear hormone receptor superfamily.

CHROMOSOMAL LOCATION

Genetic locus: PSMC4 (human) mapping to 19q13.2; Psmc4 (mouse) mapping to 7 A3.

SOURCE

PSMC4 (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of PSMC4 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-46465 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

PSMC4 (C-13) is recommended for detection of PSMC4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

PSMC4 (C-13) is also recommended for detection of PSMC4 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for PSMC4 siRNA (h): sc-45851, PSMC4 siRNA (m): sc-45852, PSMC4 shRNA Plasmid (h): sc-45851-SH, PSMC4 shRNA Plasmid (m): sc-45852-SH, PSMC4 shRNA (h) Lentiviral Particles: sc-45851-V and PSMC4 shRNA (m) Lentiviral Particles: sc-45852-V.

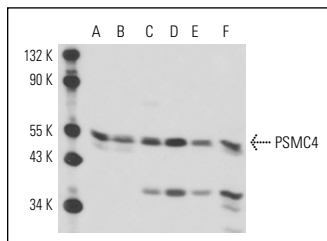
Molecular Weight of PSMC4: 47 kDa.

Positive Controls: HEL 92.1.7 cell lysate: sc-2270, HeLa whole cell lysate: sc-2200 or ES-2 cell lysate: sc-24674.

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



PSMC4 (C-13): sc-46465. Western blot analysis of PSMC4 expression in HEL 92.1.7 (A), TF-1 (B), HeLa (C), ES-2 (D), MIA PaCa-2 (E) and OV-90 (F) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Chen, G., et al. 2010. The tumor suppressor ING3 is degraded by SCF^{Skp2}-mediated ubiquitin-proteasome system. *Oncogene* 9: 1498-1508.

STORAGE

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

PROTOCOLS

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



Try **PSMC4 (G-4): sc-166115** or **PSMC4 (H-2): sc-166003**, our highly recommended monoclonal alternatives to PSMC4 (C-13).