

p44S10 (D-16): sc-14270

BACKGROUND

In eukaryotic cells, selective breakdown of cellular proteins is ensured by two distinct pathways, ubiquitination and degradation by the 26S proteasome. At specific stages of development, embryo- and tissue-specific components of the 26S proteasome are formed by developmentally regulated alternative splicing, including Rpn10a through Rpn10e (also designated pUb-R2 through pUb-R5). The pUb-R2 subunit, originally identified as S5a, is ubiquitously expressed and may perform proteolysis constitutively in a wide variety of cells. p44S10 is a highly conserved proteasome regulatory subunit that is expressed in heart, liver, skeletal muscle and pancreas. In addition to normal tissue expression, p44S10 is also expressed in several melanoma cell lines, such as MCF-7, 451Lu and WM164. Since forced expression of p44S10 in radial growth phase melanoma cells results in an increase in cellular proliferation, p44S10 may represent a potential link between regulation of proteasome activity and tumor cell proliferation *in vivo*.

CHROMOSOMAL LOCATION

Genetic locus: PSMD6 (human) mapping to 3p14.1; Psm6 (mouse) mapping to 14 A1.

SOURCE

p44S10 (D-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of p44S10 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-14270 P, (100 µg 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

p44S10 (D-16) is recommended for detection of p44S10 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).

p44S10 (D-16) is also recommended for detection of p44S10 in additional species, including bovine.

Suitable for use as control antibody for p44S10 siRNA (h): sc-41383, p44S10 siRNA (m): sc-41384, p44S10 shRNA Plasmid (h): sc-41383-SH, p44S10 shRNA Plasmid (m): sc-41384-SH, p44S10 shRNA (h) Lentiviral Particles: sc-41383-V and p44S10 shRNA (m) Lentiviral Particles: sc-41384-V.

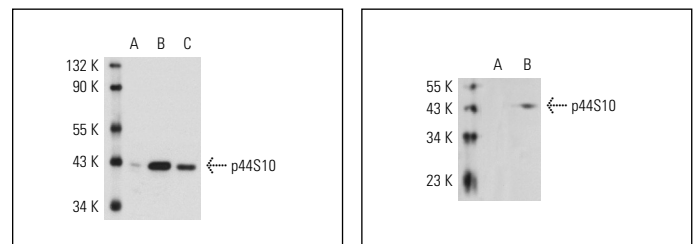
Molecular Weight of p44S10: 44 kDa.

Positive Controls: p44S10 (m): 293 Lysate: sc-110722, p44S10 (h2): 293 Lysate: sc-112973 or HeLa whole cell lysate: sc-2200.

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



p44S10 (D-16): sc-14270. Western blot analysis of p44S10 expression in non-transfected: sc-110760 (A), human p44S10 transfected: sc-110581 (B) and mouse p44S10 transfected: sc-110722 (C) 293 whole cell lysates.

p44S10 (D-16): sc-14270. Western blot analysis of p44S10 expression in non-transfected: sc-110760 (A) and human p44S10 transfected: sc-112973 (B) 293 whole cell lysates.

SELECT PRODUCT CITATIONS

1. Crespillo, A., et al. 2011. Reduction of body weight, liver steatosis and expression of stearoyl-CoA desaturase 1 by the isoflavone daidzein in diet-induced obesity. *Br. J. Pharmacol.* 164: 1899-1915.

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.


 MONOS
Satisfation
Guaranteed

Try **p44S10 (E-12): sc-393580** or **p44S10 (H-5): sc-398745**, our highly recommended monoclonal alternatives to p44S10 (D-16).