

SPSY (H-130): sc-99159

BACKGROUND

Spermine synthase (SPSY) catalyzes the production of spermine from spermidine. Spermine, a polyamine ubiquitously present in most organisms, is essential for normal cell growth and differentiation. Because absence of spermine increases sensitivity of cells to anti-tumor agents, spermine synthase (and other polyamine biosynthesis) is an attractive target for anti-neoplastic therapy.

REFERENCES

1. Hamasaki-Katagiri, N., et al. 1998. Spermine is not essential for growth of *Saccharomyces cerevisiae*: identification of the SPE4 gene (spermine synthase) and characterization of a SPE4 deletion mutant. *Gene* 210: 195-201.
2. Nilsson, J., et al. 2000. Skin fibroblasts from spermine synthase-deficient hemizygous gyro male (Gy/Y) mice overproduce spermidine and exhibit increased resistance to oxidative stress but decreased resistance to UV irradiation. *Biochem. J.* 2: 381-387.
3. Korhonen, V.P., et al. 2001. Spermine deficiency resulting from targeted disruption of the spermine synthase gene in embryonic stem cells leads to enhanced sensitivity to antiproliferative drugs. *Mol. Pharmacol.* 59: 231-238.

CHROMOSOMAL LOCATION

Genetic locus: SMS (human) mapping to Xp22.11; Sms (mouse) mapping to X F4.

SOURCE

SPSY (H-130) is a rabbit polyclonal antibody raised against amino acids 202-331 mapping near the C-terminus of SPSY 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.

APPLICATIONS

SPSY (H-130) is recommended for detection of Spermine synthase 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).

SPSY (H-130) is also recommended for detection of Spermine synthase in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SPSY siRNA (h): sc-45279, SPSY siRNA (m): sc-45280, SPSY shRNA Plasmid (h): sc-45279-SH, SPSY shRNA Plasmid (m): sc-45280-SH, SPSY shRNA (h) Lentiviral Particles: sc-45279-V and SPSY shRNA (m) Lentiviral Particles: sc-45280-V.

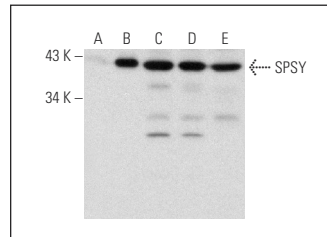
Molecular Weight of SPSY: 41 kDa.

Positive Controls: SPSY (m): 293T Lysate: sc-123759, HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

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



SPSY (H-130): sc-99159. Western blot analysis of SPSY expression in non-transfected 293T: sc-117752 (A), mouse SPSY transfected 293T: sc-123759 (B), HeLa (C), K-562 (D) and Jurkat (E) whole cell lysates.

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.


 MONOS
Satisfaction
Guaranteed

Try **SPSY (A-4): sc-376294**, our highly recommended monoclonal alternative to SPSY (H-130).