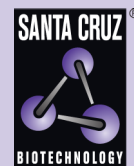


TSPY (H-11): sc-137050



The Power to Question

BACKGROUND

Testis-specific protein Y-encoded (TSPY) is the product of a tandem gene cluster on the human proximal Yp gene. TSPY genes have been conserved and maintained on the mammalian Y chromosome since before the radiation of eutheria, 80 million years ago. TSPY functions as an important factor in cell cycle progression, cell proliferation and tumorigenesis. TSPY may participate in the oncogenesis of gonadoblastoma expression and a variety of other tumor tissues, including testicular germ cell tumors, prostate cancer, melanoma and liver cancer. The Sox family of proteins regulate the expression of TSPY, and its activity is phosphorylation dependent. TSPY may be a potential candidate in vaccine strategy for immunotherapy in hepatocellular carcinoma patients.

REFERENCES

- Schnieders, F., et al. 1996. Testis-specific protein, Y-encoded (TSPY) expression in testicular tissues. *Hum. Mol. Genet.* 5: 1801-1807.
- Ratti, A., et al. 2000. Characterization of a new TSPY gene family member in Yq (TSPYq1). *Cytogenet. Cell Genet.* 88: 159-162.
- Dechend, F., et al. 2000. TSPY variants in six loci on the human Y chromosome. *Cytogenet. Cell Genet.* 91: 67-71.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 480100. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Schubert, S., et al. 2003. Generation and characterization of TSPY. *Biol. Reprod.* 69: 968-975.
- Bartmann, A.K., et al. 2004. TSPY detection in blood, buccal, and urine cells of patients with 45,X karyotype. *Am. J. Med. Genet. A* 130A: 320-321.

CHROMOSOMAL LOCATION

Genetic locus: TSPY1 (human) mapping to Yp11.2; Tspyl1 (mouse) mapping to 10 B1.

SOURCE

TSPY (H-11) is a mouse monoclonal antibody raised against amino acids 1-120 mapping at the N-terminus of TSPY of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TSPY (H-11) is available conjugated to agarose (sc-137050 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-137050 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-137050 PE), fluorescein (sc-137050 FITC), Alexa Fluor® 488 (sc-137050 AF488), Alexa Fluor® 546 (sc-137050 AF546), Alexa Fluor® 594 (sc-137050 AF594) or Alexa Fluor® 647 (sc-137050 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-137050 AF680) or Alexa Fluor® 790 (sc-137050 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

TSPY (H-11) is recommended for detection of TSPY of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for TSPY siRNA (h): sc-91547, TSPY siRNA (m): sc-76767, TSPY shRNA Plasmid (h): sc-91547-SH, TSPY shRNA Plasmid (m): sc-76767-SH, TSPY shRNA (h) Lentiviral Particles: sc-91547-V and TSPY shRNA (m) Lentiviral Particles: sc-76767-V.

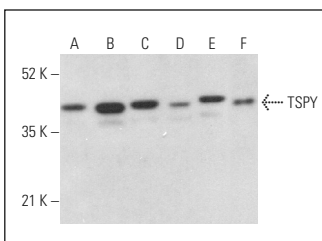
Molecular Weight of TSPY isoforms: 33-38 kDa.

Positive Controls: NTERA-2 cl.D1 whole cell lysate, F9 whole cell lysate: sc-2245 or SH-SY5Y cell lysate: sc-3812.

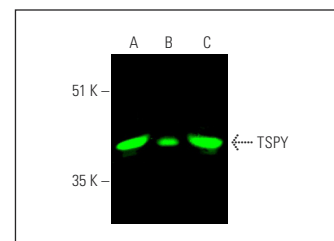
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



TSPY (H-11): sc-137050. Western blot analysis of TSPY expression in WI-38 (A), WEHI-231 (B), SH-SY5Y (C), Neuro-2A (D) and PC-12 (E) whole cell lysates and rat brain tissue extract (F).



TSPY (H-11): sc-137050. Near-infrared western blot analysis of TSPY expression in SH-SY5Y (A), NTERA-2 cl.D1 (B) and F9 (C) whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgGκ BP-CFL 680: sc-516180.

SELECT PRODUCT CITATIONS

- Rho, N.Y., et al. 2023. Testis-specific protein Y-encoded (TSPY) is required for male early embryo development in *Bos taurus*. *Int. J. Mol. Sci.* 24: 3349.

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.