TSPYL6 (N-20): sc-249113



The Power to Question

BACKGROUND

TSPYL6 (testis-specific Y-encoded-like protein 6) is a 410 amino acid member of the nucleosome assembly protein (NAP) family. TSPYL6 is believed to be similar to testis-specific Y-encoded protein 1 in form and function. The gene that encodes TSPYL6 is found on chromosome 2 which consists of 237 million bases encoding over 1,400 genes and making up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2. The lipid metabolic disorder sitosterolemia is associated with ABCG5 and ABCG8. An extremely rare recessive genetic disorder, Alström syndrome is due to mutations in the ALMS1 gene. Interestingly, chromosome 2 contains what appears to be a vestigial second centromere and vestigial telomeres which gives credence to the hypothesis that human chromosome 2 is the result of an ancient fusion of two ancestral chromosomes seen in modern form today in apes.

REFERENCES

- Kido, T., et al. 2006. The rat Tspy is preferentially expressed in elongated spermatids and interacts with the core histones. Biochem. Biophys. Res. Commun. 350: 56-67.
- Kido, T., et al. 2008. The human Y-encoded testis-specific protein interacts functionally with eukaryotic translation elongation factor eEF1A, a putative oncoprotein. Int. J. Cancer 123: 1573-1585.
- 3. Li, Y., et al. 2008. TSPY and its X-encoded homologue interact with cyclin B but exert contrasting functions on cyclin-dependent kinase 1 activities. Oncogene 27: 6141-6150.
- 4. Lau, Y.F., et al. 2009. Gonadoblastoma locus and the TSPY gene on the human Y chromosome. Birth Defects Res. C Embryo Today 87: 114-122.
- Vallangeon, B.D., et al. 2010. Macroscopic sertoli cell nodule: a study of 6 cases that presented as testicular masses. Am. J. Surg. Pathol. 34: 1874-1880.
- 6. Nickkholgh, B., et al. 2010. Y chromosome TSPY copy numbers and semen quality. Fertil. Steril. 94: 1744-1747.
- Kumar, S., et al. 2011. Molecular mining of alleles in water buffalo Bubalus bubalis and characterization of the TSPY1 and COL6A1 genes. PLoS ONE 6: e24958.

CHROMOSOMAL LOCATION

Genetic locus: TSPYL6 (human) mapping to 2p16.2.

SOURCE

TSPYL6 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of TSPYL6 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-249113 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TSPYL6 (N-20) is recommended for detection of TSPYL6 of 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); non cross-reactive with other TSPYL family members.

Suitable for use as control antibody for TSPYL6 siRNA (h): sc-94760, TSPYL6 shRNA Plasmid (h): sc-94760-SH and TSPYL6 shRNA (h) Lentiviral Particles: sc-94760-V.

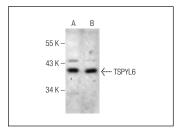
Molecular Weight of TSPYL6: 35 kDa.

Positive Controls: A-673 cell lysate: sc-2414 or Hep G2 cell lysate: sc-2227.

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



TSPYL6 (N-20): sc-249113. Western blot analysis of TSPYL6 expression in A-673 (**A**) and Hep G2 (**B**) 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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**