

TSPYL1 (T-14): sc-169713

BACKGROUND

TSPYL1 (testis-specific Y-encoded-like protein 1), also known as TSPYL, is a 437 amino acid protein that localizes to the nucleolus and belongs to the nucleosome assembly protein (NAP) family. TSPYL1 is expressed in testis, heart, lung, liver, spleen, ovary, kidney, prostate and brain, and is encoded by a gene that maps to human chromosome 6q22.1. Defects in the gene encoding TSPYL1 are the cause of an autosomal recessive disorder known as sudden infant death with dysgenesis of the testes syndrome (SIDDT). Infants with SIDDT appear normal at birth but eventually die abruptly of cardiorespiratory arrest within 12 months of age. Males with SIDDT are typically characterized by fetal testicular dysgenesis and ambiguous genitalia, however, female sexual development appears normal.

REFERENCES

- Shima, H., Kuraoka, T. and Hashimoto, T. 1997. Testis-determining factor and gonadal dysgenesis. *Int. J. Urol.* 4: 3-7.
- Vogel, T., Dittrich, O., Mehraein, Y., Dechend, F., Schnieders, F. and Schmidtke, J. 1998. Murine and human TSPYL genes: novel members of the TSPY-SET-NAP1L1 family. *Cytogenet. Cell Genet.* 81: 265-270.
- Delbridge, M.L. and Graves, J.A. 1999. Mammalian Y chromosome evolution and the male-specific functions of Y chromosome-borne genes. *Rev. Reprod.* 4: 101-109.
- Scherl, A., Coute, Y., Deon, C., Calle, A., Kindbeiter, K., Sanchez, J.C., Greco, A., Hochstrasser, D. and Diaz, J.J. 2002. Functional proteomic analysis of human nucleolus. *Mol. Biol. Cell.* 13: 4100-4109.
- Puffenberger, E.G., Hu-Lince, D., Parod, J.M., Craig, D.W., Dobrin, S.E., Conway, A.R., Donarum, E.A., Strauss, K.A., Dunckley, T., Cardenas, J.F., Melmed, K.R., Wright, C.A., Liang, W., Stafford, P., Flynn, C.R., Morton, D.H. and Stephan, D.A. 2004. Mapping of sudden infant death with dysgenesis of the testes syndrome (SIDDT) by a SNP genome scan and identification of TSPYL loss of function. *Proc. Natl. Acad. Sci. USA* 101: 11689-11694.
- Online Mendelian Inheritance in Man, OMIM[™]. 2005. Johns Hopkins University, Baltimore, MD. MIM Number: 604714. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: Tspyl1 (mouse) mapping to 10 B1.

SOURCE

TSPYL1 (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TSPYL1 of mouse 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-169713 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TSPYL1 (T-14) is recommended for detection of TSPYL1 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 TSPYL1 siRNA (m): sc-154732, TSPYL1 shRNA Plasmid (m): sc-154732-SH and TSPYL1 shRNA (m) Lentiviral Particles: sc-154732-V.

Molecular Weight of TSPYL1: 49 kDa.

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) 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.

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.