SANTA CRUZ BIOTECHNOLOGY, INC.

TDRP (C-17): sc-87598

BACKGROUND

TDRP (testis development related protein), also known as C8orf42 or INM01, is a 185 amino acid protein thought to play a role in spermatogenesis. The gene encoding TDRP is located on chromosome 8. Made up of nearly 146 million bases, chromosome 8 encodes about 800 genes. Translocation of portions of chromosome 8 with amplifications of the c-Myc gene are found in some leukemias and lymphomas, and typically associated with a poor prognosis. Portions of chromosome 8 have been linked to schizophrenia and bipolar disorder. Trisomy 8, also known as Warkany syndrome 2, most often results in early miscarriage but is occasionally seen in a mosaic form in surviving patients who suffer to a varying degree from a number of symptoms including retarded mental and motor development, and certain facial and developmental defects. WRN is a DNA helicase encoded by chromosome 8 and shown defective in those with the early aging disorder Werner syndrome. Chromosome 8 is also associated with Pfeiffer syndrome, congenital hypothyroidism and Waardenburg syndrome.

REFERENCES

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2. Zollino, M., et al. 1995. Constitutional trisomy 8 and myelodysplasia: report of a case and review of the literature. Leuk. Res. 19: 733-736.
3. Kashino, G., et al. 2001. Preferential expression of an intact WRN gene in Werner syndrome cell lines in which a normal chromosome 8 has been introduced. Biochem. Biophys. Res. Commun. 289: 111-115.
4. Selicorni, A., et al. 2002. Cytogenetic mapping of a novel locus for type II Waardenburg syndrome. Hum. Genet. 110: 64-67.
5. McQueen, M.B., et al. 2005. Combined analysis from eleven linkage studies of bipolar disorder provides strong evidence of susceptibility loci on chromosomes 6q and 8q. Am. J. Hum. Genet. 77: 582-595.
6. Nusbaum, C., et al. 2006. DNA sequence and analysis of human chromosome 8. Nature 439: 331-335.
7. Wang, X., et al. 2010. Molecular cloning of a novel nuclear factor, TDRP1, in spermatogenic cells of testis and its relationship with spermatogenesis. Biochem. Biophys. Res. Commun. 394: 29-35.
8. Kan, M., et al. 2014. Association study of newly identified age-related macular degeneration susceptible loci SOD2, MBP, and C8orf42 in Han Chinese population. Diagn. Pathol. 9: 73.

CHROMOSOMAL LOCATION

Genetic locus: TDRP (human) mapping to 8p23.3; Tdrp (mouse) mapping to 8 A1.1.

SOURCE

TDRP (C-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of TDRP of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-87598 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TDRP (C-17) is recommended for detection of TDRP of mouse, rat and human 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).

TDRP (C-17) is also recommended for detection of TDRP in additional species, including bovine, porcine and avian.

Suitable for use as control antibody for TDRP siRNA (h): sc-77762, TDRP siRNA (m): sc-108784, TDRP shRNA Plasmid (h): sc-77762-SH, TDRP shRNA Plasmid (m): sc-108784-SH, TDRP shRNA (h) Lentiviral Particles: sc-77762-V and TDRP shRNA (m) Lentiviral Particles: sc-108784-V.

Molecular Weight of TDRP: 20 kDa.

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) 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.

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.