SANTA CRUZ BIOTECHNOLOGY, INC.

TEX19.2 (P-14): sc-169581

BACKGROUND

Testis-expressed protein 19.2, also known as Tex19b or Tex19.2, is a nuclear protein. TEX19.2 is specifically expressed in somatic cells of male gonad lineage and has shown a restricted expression in pluripotent stem cells and germ line. TEX19 is a mammalian-specific protein duplicated in mouse and rat, renamed Tex19.1 and Tex19.2, whereas only one form is found in human. TEX19.2 is found on mouse chromosome 11 in close proximity to TEX19.1. Tex19.1 gene plays an essential role in spermatogenesis and placenta-supported development and TEX19.2 is likely to provide a similar function. TEX19.1 mRNA is regulated by DAZL binding to the 3' UTR, however, similar regulation has yet to be shown for TEX19.2. Deletion of Tex19.1 gene causes activation of endogenous retroviruses and defective spermatogenesis in mice but the effects of TEX19.2 deletion remain uncharacterized.

REFERENCES

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2. Kuntz, S., et al. 2008. Tex19, a mammalian-specific protein with a restricted expression in pluripotent stem cells and germ line. Stem Cells 26: 734-744.
3. Zeng, M., et al. 2009. DAZL binds to 3'UTR of Tex19.1 mRNAs and regulates Tex19.1 expression. Mol. Biol. Rep. 36: 2399-2403.
4. Yang, F., et al. 2010. The ubiquitin ligase Ubr2, a recognition E3 component of the N-end rule pathway, stabilizes Tex19.1 during spermatogenesis. PLoS ONE 5: e14017.
5. Nestor, C.E., et al. 2012. Tissue type is a major modifier of the 5-hydroxymethylcytosine content of human genes. Genome Res. 22: 467-477.
6. Celebi, C., et al. 2012. Tex 19 paralogs exhibit a gonad and placenta-specific expression in the mouse. J. Reprod. Dev. 58: 360-365.
7. Reichmann, J., et al. 2013. The genome-defence gene Tex19.1 suppresses LINE-1 retrotransposons in the placenta and prevents intra-uterine growth retardation in mice. Hum. Mol. Genet. 22: 1791-1806.
8. Tarabay, Y., et al. 2013. The mammalian-specific Tex19.1 gene plays an essential role in spermatogenesis and placenta-supported development. Hum. Reprod. 28: 2201-2214.

CHROMOSOMAL LOCATION

Genetic locus: Tex19.2 (mouse) mapping to 11 E2.

SOURCE

TEX19.2 (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TEX19.2 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-169581 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TEX19.2 (P-14) is recommended for detection of TEX19.2 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 TEX family members.

Suitable for use as control antibody for TEX19.2 siRNA (m): sc-154218, TEX19.2 shRNA Plasmid (m): sc-154218-SH and TEX19.2 shRNA (m) Lentiviral Particles: sc-154218-V.

Molecular Weight of TEX19.2: 35 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.