

## ▶ TEX19.1 (R-14): sc-139444

### BACKGROUND

TEX19.1 (testis expressed gene 19.1), also known as Tex19a or Tex19, is a 351 amino acid mouse protein that localizes to the nucleus and, in addition to its expression in testis, placenta and ovary, is also present during early embryogenesis, suggesting an involvement in fetal development and maturation. Additionally, TEX19.1 may also play a role in the repression of transposable genetic elements and in the maintenance of genomic stability through successive generations. Defects or deletions in the gene encoding TEX19.1 are associated with defective spermatogenesis and activation of endogenous rodent retroviruses, further supporting the importance of TEX19.1 in proper embryonic development.

### REFERENCES

1. Wang, P.J., McCarrey, J.R., Yang, F. and Page, D.C. 2001. An abundance of X-linked genes expressed in spermatogonia. *Nat. Genet.* 27: 422-426.
2. Scherthan, H. 2003. Knockout mice provide novel insights into meiotic chromosome and telomere dynamics. *Cytogenet. Genome Res.* 103: 235-244.
3. de Rooij, D.G. and de Boer, P. 2003. Specific arrests of spermatogenesis in genetically modified and mutant mice. *Cytogenet. Genome Res.* 103: 267-276.
4. Surani, M.A., Hayashi, K. and Hajkova, P. 2007. Genetic and epigenetic regulators of pluripotency. *Cell* 128: 747-762.
5. Ollinger, R., Childs, A.J., Burgess, H.M., Speed, R.M., Lundegaard, P.R., Reynolds, N., Gray, N.K., Cooke, H.J. and Adams, I.R. 2008. Deletion of the pluripotency-associated Tex19.1 gene causes activation of endogenous retroviruses and defective spermatogenesis in mice. *PLoS Genet.* 4: e1000199.

### CHROMOSOMAL LOCATION

Genetic locus: Tex19.1 (rat) mapping to 10q32.3.

### SOURCE

TEX19.1 (R-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of TEX19.1 of rat 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-139444 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

### APPLICATIONS

TEX19.1 (R-14) is recommended for detection of TEX19.1 of rat origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with TEX19.2.

Molecular Weight of TEX19.1: 42 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.

### RESEARCH USE

For research use only, not for use in diagnostic procedures.