

# ▶ TEX14 (W-25): sc-134075

## BACKGROUND

TEX14 (testis expressed 14), also known as SGK307 (sugen kinase 307) or Protein kinase-like protein Sgk307, is a 1,497 amino acid protein that belongs to the protein kinase superfamily and is expressed in testis. The gene encoding TEX14 is located on chromosome 17 and is required for spermatogenesis and normal structure of the intercellular bridge that connects spermatocytes and spermatogonia. TEX14 co-localizes with the centralspindlin complex, MKLP-1 (mitotic kinesin-like protein 1) and male germ cell Rac GTPase (Rac GTPase-activating protein) and converts these midbody matrix proteins into stable intercellular bridge components. TEX14 contains three ANK repeats and one protein kinase domain. Three isoforms exist due to alternative splicing events.

## REFERENCES

1. Voropaev, M.S. 1980. Cassette holder for x-raying the femoral neck in an axial projection. *Ortop. Travmatol. Protez.* 55-56.
2. 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.
3. Wu, M.H., Rajkovic, A., Burns, K.H., Yan, W., Lin, Y.N. and Matzuk, M.M. 2003. Sequence and expression of testis-expressed gene 14 (TEX14): a gene encoding a protein kinase preferentially expressed during spermatogenesis. *Gene Expr. Patterns* 3: 231-236.
4. Greenbaum, M.P., Iwamori, N., Agno, J.E. and Matzuk, M.M. 2008. Mouse TEX14 is required for embryonic germ cell intercellular bridges but not female fertility. *Biol. Reprod.* 80: 449-457.
5. Silva, C., Wood, J.R., Salvador, L., Zhang, Z., Kostetskii, I., Williams, C.J. and Strauss, J.F. 2009. Expression profile of male germ cell-associated genes in mouse embryonic stem cell cultures treated with all-*trans* retinoic acid and testosterone. *Mol. Reprod. Dev.* 76: 11-21.

## CHROMOSOMAL LOCATION

Genetic locus: TEX14 (human) mapping to 17q22.

## SOURCE

TEX14 (W-25) is an affinity purified rabbit polyclonal antibody raised against synthetic TEX14 peptide of human origin.

## PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## 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

TEX14 (W-25) is recommended for detection of TEX14 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TEX14 siRNA (h): sc-94144, TEX14 shRNA Plasmid (h): sc-94144-SH and TEX14 shRNA (h) Lentiviral Particles: sc-94144-V.

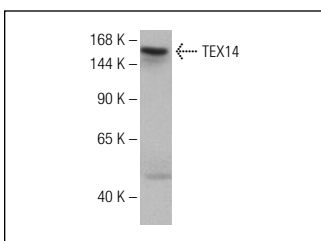
Molecular Weight of TEX14 isoforms: 168/162 kDa.

Positive Controls: Human fetal muscle tissue extract.

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA



TEX14 (W-25): sc-134075. Western blot analysis of TEX14 expression in human fetal muscle tissue extract.

## RESEARCH USE

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