## BACKGROUND

TSARG6 (testis spermatogenesis apoptosis-related gene 6 protein), also known as DnaJB13 (DnaJ homolog subfamily B member 13) or TSARG5, is a 316 amino acid member of the DnaJ/HSP 40 family of ATPase-stimulating proteins. Strongly expressed in testis and weakly expressed in liver, spleen, heart and lung, TSARG6 contains one J domain and is thought to be involved in inhibiting testis spermatogenesis apoptosis. The gene encoding TSARG6 contains eight exons and the TSARG6 protein shares $87 \%$ sequence identity with its mouse counterpart. In mice, this protein is implicated in assembly and stability of axoneme during sperm development. Three isoforms of TSARG6 exist due to alternative splicing events.

## REFERENCES

1. Ohtsuka, K. and Hata, M. 2000. Mammalian HSP 40/DnaJ homologs: cloning of novel cDNAs and a proposal for their classification and nomenclature. Cell Stress Chaperones 5: 98-112.
2. Online Mendelian Inheritance in Man, OMIM ${ }^{\text {TM }}$. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 6102063. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
3. Liu, G., Lu, G., Fu, J., Liu, S., Xing, X. and Li, L. 2003. Molecular cloning of TSARG3 gene related to apoptosis in human spermatogenic cells. Zhonghua Yi Xue Yi Chuan Xue Za Zhi 20: 107-110.
4. Liu, G., Lu, G.X. and Xing, X.W. 2004. Molecular cloning of TSARG6 gene related to apoptosis in human spermatogenic cells. Acta Biochim. Biophys. Sin. (Shanghai) 36: 93-98.
5. Guan, J. and Yuan, L. 2008. A heat-shock protein 40, DNAJB13, is an axoneme-associated component in mouse spermatozoa. Mol. Reprod. Dev. 75:1379-1386.

## CHROMOSOMAL LOCATION

Genetic locus: DNAJB13 (human) mapping to 11q13.4; Dnajb13 (mouse) mapping to 7 E 2 .

## SOURCE

TSARG6 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TSARG6 of human origin.

## PRODUCT

Each vial contains $200 \mu \mathrm{gg} \lg$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.

Blocking peptide available for competition studies, sc-55400 P, (100 $\mu \mathrm{g}$ peptide in 0.5 ml PBS containing $<0.1 \%$ sodium azide and $0.2 \% \mathrm{BSA}$ ).

## STORAGE

Store at $4^{\circ} \mathrm{C}$, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

TSARG6 (D-14) is recommended for detection of TSARG6 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); not recommended for detection of human isoforms 2 and 3.

Suitable for use as control antibody for TSARG6 siRNA (h): sc-63169, TSARG6 siRNA (m): sc-63170, TSARG6 shRNA Plasmid (h): sc-63169-SH, TSARG6 shRNA Plasmid (m): sc-63170-SH, TSARG6 shRNA (h) Lentiviral Particles: sc-63169-V and TSARG6 shRNA (m) Lentiviral Particles: sc-63170-V.

Molecular Weight of TSARG6: 36 kDa .
Positive Controls: TSARG6 (h): 293T Lysate: sc-158017 or TSARG6 (h2): 293T Lysate: sc-173898.

## 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 MarkerTM 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: 1:1001:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

## RESEARCH USE

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

