TSARG2 (K-15): sc-47531

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The Power to Question

BACKGROUND

The testis spermatocyte apoptosis-related gene 2 protein (TSARG2, also designated spermatogenesis associated-4 or SPATA4) is involved in spermatogenesis. TSARG2 is specifically expressed in spermatogonia and spermatocytes of the seminiferous tubules, and it localizes to the nucleus. The predicted molecular weight of TSARG2 ranges depending on the species. TSARG2 is significantly upregulated in cryptorchidism and therefore, is a testis-specific apoptosis candidate oncogene.

REFERENCES

1. Liu, S.F., et al. 2002. Rapid identification of human testis spermatocyte apoptosis-related gene, TSARG2, by nested PCR and draft human genome searching. Sheng Wu Hua Xue Yu Sheng Wu Wu Li Xue Bao 34: 378-382.

2. Liu, S.F., et al. 2002. Molecular cloning of SRG2, a mouse testis spermatocyte apoptosis-related gene. Sheng Wu Hua Xue Yu Sheng Wu Wu Li Xue Bao 34: 796-799.

3. Liu, S.F., et al. 2003. Molecular cloning and expression in cryptorchid testis of SRG2 from a mouse testis spermatocyte apoptosis-related gene. Yi Chuan Xue Bao 30: 943-948.

4. Liu, S.F., et al. 2004. Cloning of a full-length cDNA of human testis-specific spermatogenic cell apoptosis inhibitor TSARG2 as a candidate oncogene. Biochem. Biophys. Res. Commun. 319: 32-40.

5. Liu, S.F., et al. 2004. Cloning and characterization of testis-specific spermatogenesis associated gene homologous to human SPATA4 in rat. Biol. Pharm. Bull. 27: 1867-1870.

6. Liu, S.F., et al. 2005. Molecular cloning and bioinformatic analysis of SPATA4 gene. J. Biochem. Mol. Biol. 38: 739-747.

CHROMOSOMAL LOCATION

Genetic locus: Spata4 (mouse) mapping to 8 B1.3.

SOURCE

TSARG2 (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TSARG2 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-47531 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.

RESEARCH USE

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

APPLICATIONS

TSARG2 (K-15) is recommended for detection of TSARG2 of mouse and rat 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)], 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).

TSARG2 (K-15) is also recommended for detection of TSARG2 in additional species, including equine.

Suitable for use as control antibody for TSARG2 siRNA (m): sc-61729, TSARG2 shRNA Plasmid (m): sc-61729-SH and TSARG2 shRNA (m) Lentiviral Particles: sc-61729-V.
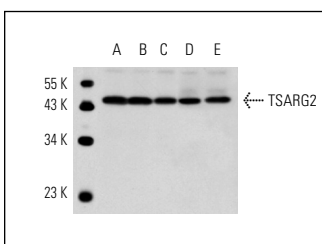
Molecular Weight of TSARG2: 34 kDa.

Positive Controls: F9 cell lysate: sc-2245, P19 cell lysate: sc-24760 or mouse testis extract: sc-2405.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA

TSARG2 (K-15): sc-47531. Western blot analysis of TSARG2 expression in F9 (**A**), P19 (**B**) and GH3 (**C**) whole cell lysates and rat testis (**D**) and mouse testis (**E**) tissue extracts.

PROTOCOLS

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