

TSSK 2 (C-19): sc-86251

BACKGROUND

TSSK 2 (testis-specific serine kinase 2), also known as DGS-G (DiGeorge syndrome protein G), SPOGA2 or STK22B (serine/threonine-protein kinase 22B), is a testis-specific serine/threonine kinase that belongs to the CAMK serine/threonine-protein kinase family. Localizing to the cytoplasm, TSSK 2 contains one protein kinase domain and is believed to play a role in the late stages of spermatogenesis. TSSK 2 shares 83% amino acid identity with the related protein kinase TSSK 1. Specifically, TSSK 2 uses magnesium as a cofactor and catalyzes the transfer of a phosphate from ATP to a target protein, such as SPAG16. Loss of TSSK 2 due to chromosomal deletion has been implicated in velocardiofacial/DiGeorge syndrome (VCF/DGS), a disorder of development that is characterized by palate anomalies, facial anomalies, immunodeficiency, conotruncal cardiac malformations and hypocalcemia.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TSSK2 (human) mapping to 22q11.21; Tssk2 (mouse) mapping to 16 A3.

SOURCE

TSSK 2 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TSSK 2 of human origin.

STORAGE

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

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-86251 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TSSK 2 (C-19) is recommended for detection of TSSK 2 of mouse, rat and 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)], 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).

TSSK 2 (C-19) is also recommended for detection of TSSK 2 in additional species, including equine.

Suitable for use as control antibody for TSSK 2 siRNA (h): sc-76768, TSSK 2 siRNA (m): sc-154741, TSSK 2 shRNA Plasmid (h): sc-76768-SH, TSSK 2 shRNA Plasmid (m): sc-154741-SH, TSSK 2 shRNA (h) Lentiviral Particles: sc-76768-V and TSSK 2 shRNA (m) Lentiviral Particles: sc-154741-V.

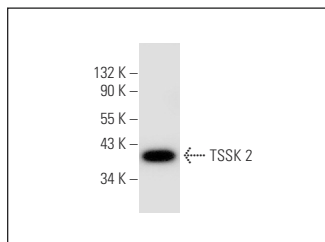
Molecular Weight of TSSK 2: 41 kDa.

Positive Controls: 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



TSSK 2 (C-19): sc-86251. Western blot analysis of TSSK 2 expression in mouse testis tissue extract.

RESEARCH USE

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