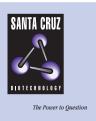
# SANTA CRUZ BIOTECHNOLOGY, INC.

# TSSK 3 (N-22): sc-130280



# BACKGROUND

The phosphorylation and dephosphorylation of proteins on serine and threonine residues is an essential means of regulating a broad range of cellular functions in eukaryotes, including cell division, homeostasis and apoptosis. A group of proteins that are intimately involved in this process are the serine/threonine (Ser/Thr) protein kinases. TSSK 3 (testis-specific serine/threonine-protein kinase 3), also known as SPOGA3, STK22C or STK22D, is a 268 amino acid protein that contains one protein kinase domain and belongs to the Ser/Thr protein kinase family. Using magnesium as a cofactor, TSSK 3 catalyzes the ATP-dependent phosphorylation of target proteins and is thought to be involved in male germ cell development and mature sperm function. Human TSSK 3 shares 100% homology with its mouse ortholog, implying a highly conserved function between species.

# REFERENCES

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- Bucko-Justyna, M., Lipinski, L., Burgering, B.M. and Trzeciak, L. 2005. Characterization of testis-specific serine-threonine kinase 3 and its activation by phosphoinositide-dependent kinase-1-dependent signalling. FEBS J. 272: 6310-6323.

# STORAGE

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### CHROMOSOMAL LOCATION

Genetic locus: TSSK3 (human) mapping to 1p35.1.

#### SOURCE

TSSK 3 (N-22) is a purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of TSSK 3 of human origin.

#### PRODUCT

Each vial contains 100  $\mu g$  lgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

## **APPLICATIONS**

TSSK 3 (N-22) is recommended for detection of TSSK 3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 TSSK 3 siRNA (h): sc-88779, TSSK 3 shRNA Plasmid (h): sc-88779-SH and TSSK 3 shRNA (h) Lentiviral Particles: sc-88779-V.

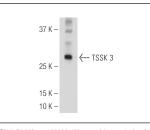
Molecular Weight of TSSK 3: 29 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

#### **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



TSSK 3 (N-22): sc-130280. Western blot analysis of TSSK 3 expression in Jurkat whole cell lysate.

#### **RESEARCH USE**

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