SANTA CRUZ BIOTECHNOLOGY, INC.

TESK2 (N-14): sc-82374

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The Power to Question

BACKGROUND

TESK2 (testicular protein kinase 2) is a nuclear protein that belongs to the protein kinase superfamily and is expressed in testis and prostate. Functioning as a dual-specificity protein kinase, TESK2 catalyzes the ATP-dependent phosphorylation of substrates and autophosphorylation on tyrosine and serine/threonine residues, thereby mediating intracellular signal transduction pathways. TESK2 requires magnesium as a cofactor and its catalytic activity is thought to play an important role in meiotic events such as spermatogenesis. TESK2 contains one protein kinase domain that is 65% identical to the kinase domain found in TESK1 (testicular protein kinase 1), suggesting a similar role for these proteins in phosphorylation events. Three isoforms of TESK2 are expressed due to alternative splicing.

REFERENCES

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3. Toshima, J., Toshima, J.Y., Takeuchi, K., Mori, R. and Mizuno, K. 2001. Cofilin phosphorylation and actin reorganization activities of testicular protein kinase 2 and its predominant expression in testicular Sertoli cells. J. Biol. Chem. 276: 31449-31458.
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5. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 604746. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
6. Oliveira, S.A., Li, Y.J., Noureddine, M.A., Zuchner, S., Qin, X., Pericak-Vance, M.A. and Vance, J.M. 2005. Identification of risk and age-at-onset genes on chromosome 1p in Parkinson disease. Am. J. Hum. Genet. 77: 252-264.

CHROMOSOMAL LOCATION

Genetic locus: TESK2 (human) mapping to 1p34.1; Tesk2 (mouse) mapping to 4 D1.

SOURCE

TESK2 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of TESK2 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.

PROTOCOLS

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

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-82374 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TESK2 (N-14) is recommended for detection of TESK2 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); non cross-reactive with family member TESK1.

TESK2 (N-14) is also recommended for detection of TESK2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TESK2 siRNA (h): sc-76644, TESK2 siRNA (m): sc-76645, TESK2 shRNA Plasmid (h): sc-76644-SH, TESK2 shRNA Plasmid (m): sc-76645-SH, TESK2 shRNA (h) Lentiviral Particles: sc-76644-V and TESK2 shRNA (m) Lentiviral Particles: sc-76645-V.

Molecular Weight of TESK2: 62 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209.

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) 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.

RESEARCH USE

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