

TESK2 (31-F): sc-100373

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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2. Zuercher, G., Rohrbach, V., Andres, A.C. and Ziemiecki, A. 2000. A novel member of the testis specific serine kinase family, tssk-3, expressed in the Leydig cells of sexually mature mice. *Mech. Dev.* 93: 175-177.
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/>
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CHROMOSOMAL LOCATION

Genetic locus: TESK2 (human) mapping to 1p34.1.

SOURCE

TESK2 (31-F) is a mouse monoclonal antibody raised against recombinant TESK2 of human origin.

PRODUCT

Each vial contains 100 μ g IgG $_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

TESK2 (31-F) is recommended for detection of TESK2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

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

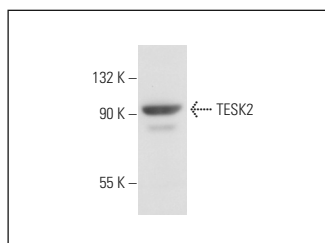
Molecular Weight of TESK2: 62 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, HL-60 whole cell lysate: sc-2209 or K-562 whole cell lysate: sc-2203.

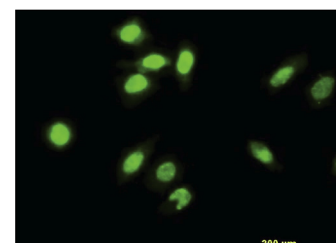
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



TESK2 (31-F): sc-100373. Western blot analysis of TESK2 expression in K-562 whole cell lysate.



TESK2 (31-F): sc-100373. Immunofluorescence staining of paraformaldehyde-fixed HeLa cells showing nuclear localization.

RESEARCH USE

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

PROTOCOLS

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