

TESK1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP16795C

Product Information

Application	WB, E
Primary Accession	Q15569
Other Accession	Q63572 , NP_006276.2
Reactivity	Human, Rat, Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB36272
Calculated MW	67684
Antigen Region	187-215

Additional Information

Gene ID	7016
Other Names	Dual specificity testis-specific protein kinase 1, Testicular protein kinase 1, TESK1
Target/Specificity	This TESK1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 187-215 amino acids from the Central region of human TESK1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	TESK1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TESK1
Function	Dual specificity protein kinase activity catalyzing autophosphorylation and phosphorylation of exogenous substrates on both serine/threonine and

tyrosine residues (By similarity). Regulates the cellular cytoskeleton by enhancing actin stress fiber formation via phosphorylation of cofilin and by preventing microtubule breakdown via inhibition of TAOK1/MARKK kinase activity (By similarity). Inhibits podocyte motility via regulation of actin cytoskeletal dynamics and phosphorylation of CFL1 (By similarity). Positively regulates integrin- mediated cell spreading, via phosphorylation of cofilin (PubMed:[15584898](#)). Suppresses ciliogenesis via multiple pathways; phosphorylation of CFL1, suppression of ciliary vesicle directional trafficking to the ciliary base, and by facilitating YAP1 nuclear localization where it acts as a transcriptional corepressor of the TEAD4 target genes AURKA and PLK1 (PubMed:[25849865](#)). Probably plays a central role at and after the meiotic phase of spermatogenesis (By similarity).

Cellular Location

Cytoplasm. Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:Q63572} Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cell projection, lamellipodium {ECO:0000250|UniProtKB:Q63572}. Note=Colocalizes with SPRY4 in vesicular spots in the cytoplasm (PubMed:15584898). Localized to F- actin-rich lamellipodia at the cell periphery following fibronectin- mediated cell adhesion of Schwann cells (By similarity) {ECO:0000250|UniProtKB:Q63572, ECO:0000269|PubMed:15584898}

Tissue Location

Expressed in podocytes and renal tubular cells in the kidney (at protein level).

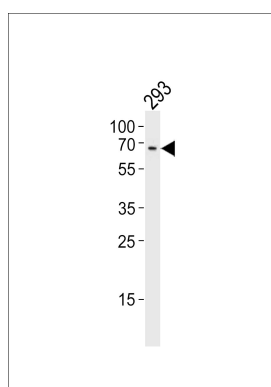
Background

This gene product is a serine/threonine protein kinase that contains an N-terminal protein kinase domain and a C-terminal proline-rich domain. Its protein kinase domain is most closely related to those of the LIM motif-containing protein kinases (LIMKs). The encoded protein can phosphorylate myelin basic protein and histone in vitro. The testicular germ cell-specific expression and developmental pattern of expression of the mouse gene suggests that this gene plays an important role at and after the meiotic phase of spermatogenesis.

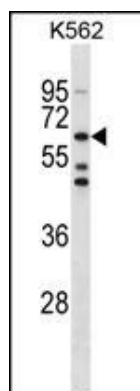
References

Davila, S., et al. Genes Immun. 11(3):232-238(2010)
 Johne, C., et al. Mol. Biol. Cell 19(4):1391-1403(2008)
 LaLonde, D.P., et al. J. Biol. Chem. 280(22):21680-21688(2005)
 Leeksma, O.C., et al. Eur. J. Biochem. 269(10):2546-2556(2002)
 Toshima, J.Y., et al. J. Biol. Chem. 276(46):43471-43481(2001)

Images



Western blot analysis of lysate from 293 cell line, using TESK1 Antibody (Center)(Cat. #AP16795c). AP16795c was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.



TESK1 Antibody (Center) (Cat. #AP16795c) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the TESK1 antibody detected the TESK1 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.