

## **TESK1 Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16795c

## **Specification**

## **TESK1 Antibody (Center) - Product Information**

Application WB,E
Primary Accession O15569

Other Accession <u>Q63572</u>, <u>NP\_006276.2</u>

Reactivity
Predicted
Rat
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region
Human
Rat
Rabbit
Rabbit
Ghype
Rabbit IgG
A7684
Rat
Rabbit IgG
Region

# **TESK1** Antibody (Center) - 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.

# **TESK1 Antibody (Center) - 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 integrinmediated 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**

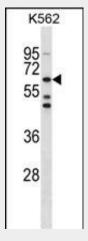
Expressed in podocytes and renal tubular cells in the kidney (at protein level).

## **TESK1 Antibody (Center) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

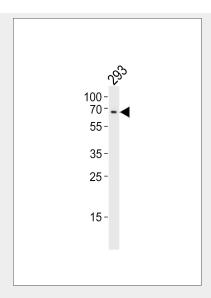
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **TESK1 Antibody (Center) - Images**



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).





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) - 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.

## **TESK1 Antibody (Center) - 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)