

### **TESK1 Antibody (Center) Blocking Peptide**

Synthetic peptide Catalog # BP16795c

#### **Specification**

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

Primary Accession

015569

# **TESK1** Antibody (Center) Blocking Peptide - Additional Information

**Gene ID 7016** 

#### **Other Names**

Dual specificity testis-specific protein kinase 1, Testicular protein kinase 1, TESK1

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

#### TESK1 Antibody (Center) Blocking Peptide - 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:<a href="http://www.uniprot.org/citations/15584898" target="\_blank">15584898</a>). 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:<a href="http://www.uniprot.org/citations/25849865"

target="\_blank">25849865</a>). 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



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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) Blocking Peptide - Protocols**

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

## Blocking Peptides

TESK1 Antibody (Center) Blocking Peptide - Images

#### TESK1 Antibody (Center) Blocking Peptide - Background

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

# **TESK1 Antibody (Center) Blocking Peptide - 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)