

**TESK1 Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP7820b****Specification**

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**TESK1 Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [Q15569](#)**TESK1 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 7016**Other Names**

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

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody <a href="/product/products/AP7820b">AP7820b</a> was selected from the C-term region of human TESK1 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**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 (C-term) 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 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 (C-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**TESK1 Antibody (C-term) Blocking Peptide - Images****TESK1 Antibody (C-term) Blocking Peptide - Background**

TESK1 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 TESK1 plays an important role at and after the meiotic phase of spermatogenesis.

**TESK1 Antibody (C-term) Blocking Peptide - References**

Toshima, J., et al., J. Biol. Chem. 270(52):31331-31337 (1995).