10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TESK1 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP7820b

Specification

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 AP7820b 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: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 (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).