Recombinant TESK2 protein (His tag)

Catalog Number	543434
Synonyms	Testicular protein kinase 2
Species	Human
Expression System	E. coli
Accession	Q96S53
Molecular Weight	Predictes a molecular mass of 33.30 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	50-326
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 50-326 aa (Q96S53) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human TESK2 Kinase Domain (residues 50-326) is a high-purity protein fragment encompassing the complete protein kinase domain of Dual Specificity Testis-Specific Protein Kinase 2. This fragment is engineered for studying the kinase's unique dual-specificity activity, enabling phosphorylation of both serine/threonine and tyrosine residues, making it an essential tool for spermatogenesis and cytoskeletal regulation research. Dual Specificity Testis-Specific Protein Kinase 2 (TESK2), encoded by the TESK2 gene, is a dual specificity protein kinase that catalyzes autophosphorylation and phosphorylation of exogenous substrates on both serine/threonine and tyrosine residues. It specifically phosphorylates cofilin at Ser-3, suggesting a role in regulating actin dynamics through cofilin inactivation. The protein is primarily localized to the nucleus and is believed to play an important role in spermatogenesis, making it a protein of significant interest in reproductive biology and cellular signaling pathways.