

For Research Use Only

# TSSK4 Recombinant antibody, PBS Only (Detector)

Catalog Number: 83401-4-PBS



## Basic Information

<b>Catalog Number:</b> 83401-4-PBS	<b>GenBank Accession Number:</b> BC111088	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 283629	<b>CloneNo.:</b> 240373F10
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q65A08	
<b>Isotype:</b> IgG	<b>Full Name:</b> testis-specific serine kinase 4	
<b>Immunogen Catalog Number:</b> AG16205	<b>Calculated MW:</b> 338 aa, 37 kDa	
	<b>Observed MW:</b> 38-45 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF-P, Cytometric bead array, Indirect ELISA

**Species Specificity:**  
human, mouse, rat

## Product Information

83401-4-PBS targets TSSK4 as part of a matched antibody pair:

MP00436-2: 83401-1-PBS capture and 83401-4-PBS detection (validated in Cytometric bead array)

MP00436-3: 83401-2-PBS capture and 83401-4-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## Background Information

TSSK4 (Testis-specific serine/threonine-protein kinase 4), testis-specific serine/threonine protein kinase 4, is a member of the testis-specific serine/threonine protein kinase family. It has autophosphorylation activity and self-binding properties; it can interact with and phosphorylate other proteins, e.g., it can bind to and phosphorylate Odf2. It's reported that TSSK4 plays an important role in spermatogenesis, TSSK4 knockout male mice develop reduced sperm motility and reduced fertility. In addition, TSSK4 regulates lung fibrosis by promoting the loss of alveolar epithelial type II cells through the HSP90-AKT signaling pathway.

## Storage

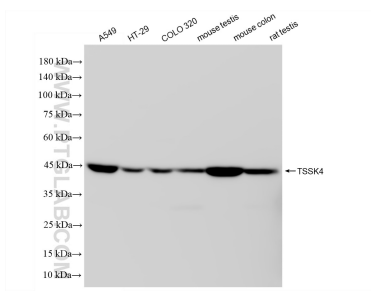
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

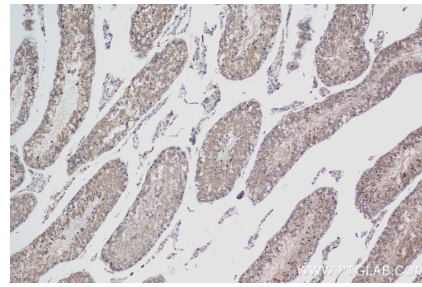
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

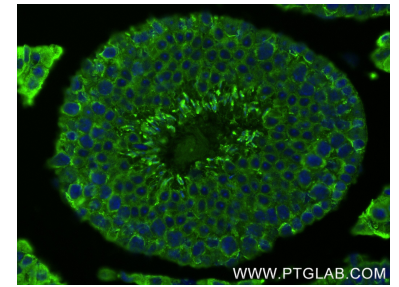
## Selected Validation Data



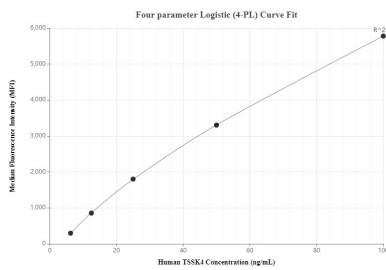
Various lysates were subjected to SDS PAGE followed by western blot with 83401-4-RR (TSSK4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83401-4-PBS in a different storage buffer formulation.



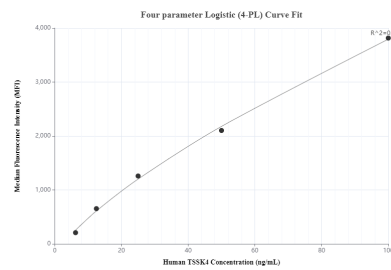
Immunohistochemical analysis of paraffin-embedded mouse testis tissue slide using 83401-4-RR (TSSK4 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83401-4-PBS in a different storage buffer formulation.



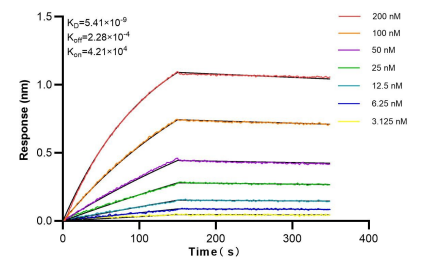
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse testis tissue using TSSK4 antibody (83401-4-RR, Clone: 240373F10) at dilution of 1:400 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83401-4-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00436-2, TSSK4 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83401-1-PBS. Detection antibody: 83401-4-PBS. Standard: Ag16205. Range: 6.25-100 ng/mL.



Cytometric bead array standard curve of MP00436-3, TSSK4 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83401-2-PBS. Detection antibody: 83401-4-PBS. Standard: Ag16205. Range: 6.25-100 ng/mL.



Bi-layer interferometry (BLI) kinetic assays of 83401-4-RR against Human TSSK4 were performed. The affinity constant is 5.41 nM.