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TSSK4 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11247b

Product Information

Application	WB, IHC-P, IF, E
Primary Accession	Q6SA08
Other Accession	Q9D411, NP_777604.2
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB27979
Calculated MW	37454
Antigen Region	226-254

Additional Information

Gene ID	283629
Other Names	Testis-specific serine/threonine-protein kinase 4, TSK-4, TSSK-4, Testis-specific kinase 4, Serine/threonine-protein kinase 22E, TSSK4, C14orf20, STK22E, TSSK5
Target/Specificity	This TSSK4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 226-254 amino acids from the C-terminal region of human TSSK4.
Dilution	WB~~1:1000 IHC-P~~1:100~500 IF~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	TSSK4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TSSK4 (HGNC:19825)

Function	Serine/threonine kinase which is involved in male germ cell development and in mature sperm function (By similarity). May be involved in the Cre/Creb signaling pathway (By similarity). Phosphorylates CREB1 on 'Ser-133' in vitro and can stimulate Cre/Creb pathway in cells (PubMed:15964553). Phosphorylates CREM on 'Ser-116' in vitro (By similarity). Phosphorylates ODF2 on 'Ser-95' (By similarity).
Cellular Location	Cytoplasmic vesicle, secretory vesicle, acrosome {ECO:0000250|UniProtKB:Q9D411}. Cell projection, cilium, flagellum {ECO:0000250|UniProtKB:Q9D411}. Note=In spermatozoa, present in the sperm head and in the flagellum. {ECO:0000250|UniProtKB:Q9D411}
Tissue Location	Expressed only in the testis.

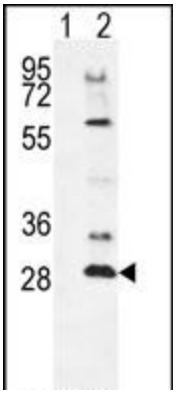
Background

This gene encodes a member of the testis-specific serine/threonine kinase family. The encoded protein is thought to be involved in spermatogenesis via stimulation of the CREB/CRE responsive pathway through phosphorylation of the cAMP responsive element binding protein transcription factor. Alternative splicing results in multiple transcript variants.

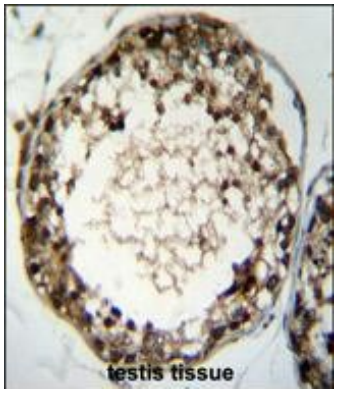
References

Aston, K.I., et al. Hum. Reprod. 25(6):1383-1397(2010)
Su, D., et al. J. Androl. 29(4):374-378(2008)
Zeng, M., et al. BMB Rep 41(4):300-304(2008)
Matsuoka, S., et al. Science 316(5828):1160-1166(2007)
Chen, X., et al. Biochem. Biophys. Res. Commun. 333(3):742-749(2005)

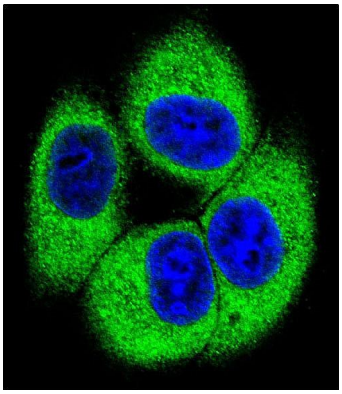
Images



Western blot analysis of TSSK4 (arrow) using rabbit polyclonal TSSK4 Antibody (C-term) (Cat. #AP11247b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the TSSK4 gene.



TSSK4 Antibody (C-term) (Cat. #AP11247b)immunohistochemistry analysis in formalin fixed and paraffin embedded human testis tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of TSSK4 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



Confocal immunofluorescent analysis of TSSK4 Antibody (C-term)(Cat#AP11247b) with 293 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).