

## Product datasheet for **SC323480**

### PBK (NM\_018492) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PBK (NM_018492) Human Untagged Clone
Tag:	Tag Free
Symbol:	PBK
Synonyms:	CT84; HEL164; Nori-3; SPK; TOPK
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC323480 sequence for NM_018492 edited (data generated by NextGen Sequencing)

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ATGGAAGGGATCAGTAATTTCAAGACACCAAGCAAATTATCAGAAAAAAGAAATCTGTA
TTATGTTCAACTCCAATAAAATATCCCGGCCTCTCCGTTTATGCAGAAGCTTGCTTT
GGTACTGGGGTAAATGTGTACCTAATGAAAAGATCTCCAAGAGGTTTGTCTCATTCTCT
TGGGCTGTAATGAAGATTAATCCTATATGTAATGATCATTATCGAAGTGTGTATCAAAG
AGACTAATGGATGAAGCTAAGATTTTGAAAAGCCTTCATCATCAAACATTGTTGGTTAT
CGTGCTTTTACTGAAGCCAGTGATGGCAGTCTGTGTCTTGCTATGGAATATGGAGGTGAA
AAGTCTCTAAATGACTTAATAGAAGAACGATATAAAGCCAGCCAAGATCCTTTTCCAGCA
GCCATAATTTTAAAAGTTGCTTTGAATATGGCAAGAGGGTTAAAGTATCTGCACCAAGAA
AAGAACTGCTTCATGGAGACATAAAGTCTTCAAATGTTGTAATTAAGGCGATTTTGAA
ACAATTAATCTGTGATGTAGGAGTCTCTTACCAGTGGATGAAAATATGACTGTGACT
GACCCTGAGGCTTGTACATTGGCACAGAGCCATGGAAACCCAAAGAAAGCTGTGGAGGAG
AATGGTGTATTACTGACAAGGCAGACATATTTGCCTTTGGCCTTACTTTGTGGGAAATG
ATGACTTTATCGATTCCACACATTAATCTTTCAAATGATGATGATGATGAAGATAAACT
TTTGATGAAAAGTATTTGATGATGAAGCATACTATGCAGCCTTGGGAACTAGGCCACCT
ATTAATATGGAAGAACTGGATGAATCATACCAGAAAGTAATTGAACTCTTCTCTGTATGC
ACTAATGAAGACCCTAAAGATCGTCTTCTGCTGCACACATTGTTGAAGCTCTGGAACA
GATGTCTAG

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Clone variation with respect to NM\_018492.2  
191 a=>t;192 a=>g;320 a=>g;822 g=>c



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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for mutant NM_018492 unedited ACCCGCCGTTGAGCAATGGGCGGTAGGCGGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGA ACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGATGTGTTGGTGCT AGAGGCAGCTGCAGGGTCTCGCTGGGGGCCGCTCGGGACCAATTTGAAGAGGTAAGTGGCCACGACTTA TTTTCACTCCGACCTTTCCTCCAGGCGGTGAGACTCTGGACTGAGAGTGGCTTTCACAATGGAAGGGA TCAGTAATTTCAAGACACCAAGCAAATTATCAGAAAAAAGAAATCTGTATTATGTTCAACTCCAATA TAAATATCCCCGGCCTCTCCGTTATATGCAGGAGGCTTTGGCTTTTGGTACCTGGGGGTAATGGGTGT ACCCTAAATGAAAAATTTCTCCAAGAAGTTTTGTCTTCATTTCTCCTTGGGGCTTGATGGAAAAAT AAAATCCCATATATGTTAAGGATCCATATATCGGAAGTGGTGTTCAAAAAATAAGGGGATAAG CCCTAAAAATTTTGAAGGACCTTTATTCATCCCAAACCTTGGTGGGGTATATCGGCGCTTTTACCGG AACCACTGGAAGGGGATCTCTGTGTTTGGATAGGGAATTATGGAATGGAAGGTTCTCTATGAGCTT TAATTAAGGACCGATTATAGCCCCCGCCCAATTTCTTTTCCAGCCCCATTTTTTTTTAAAA TGTTTGTCTTTATATATGTTGGGAAGAGAGTGTAAATATTTGCGCGCCCAAGAAGAAGACACGCGT GCTTGGAGAGCACAAAAACCTTCTCACAGATGTGTTGATATATAAGCGACGCTTTGTGACACACAACA AATGTGGTGAGAGGAGGATCTCCTTCCCCACGCGTGGAAGAATAGTTGTGATGGAGACCACGACGGCT GCTTATAGTGGCGCACCACTCGTGCACAAAACTTTGTGTGAGAGAAGCGTTTTATTATGCAG
<b>Kinase Domain Sequence:</b>	>SC323480 kinase domain raw sequence. By performing <a href="#">BLASTX</a> analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation CYAATGMCATGGGCGGTAGGCGGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAACCGTC AGAATTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGATGTGTTGGTCTAGAGGC AGCTGCAGGGTCTCGCTGGGGGCCGCTCGGGACCAATTTGAAGAGGTAAGTGGCCACGACTTATTTTCA CCTCCGACCTTTCTCCAGGCGGTGAGACTCTGGACTGAGAGTG
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_018492
<b>Insert Size:</b>	1850 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>OTI Annotation:</b>	This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." <a href="#">Cell, 2008 May p536-548.</a>
<b>Components:</b>	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_018492.2</a> , <a href="#">NP_060962.2</a>

RefSeq Size: 1899 bp  
RefSeq ORF: 969 bp  
Locus ID: 55872  
UniProt ID: [Q96KB5](#)

Cytogenetics: 8p21.1

Domains: pkinase, TyrKc, S\_TKc

Protein Families: Druggable Genome, Protein Kinase

**Gene Summary:** This gene encodes a serine/threonine protein kinase related to the dual specific mitogen-activated protein kinase kinase (MAPKK) family. Evidence suggests that mitotic phosphorylation is required for its catalytic activity. The encoded protein may be involved in the activation of lymphoid cells and support testicular functions, with a suggested role in the process of spermatogenesis. Overexpression of this gene has been implicated in tumorigenesis. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2013]

Transcript Variant: This variant (1) represents the longest transcript, and encodes the shorter isoform (1). Variants 1 and 3 encode the same isoform (1).