

Product datasheet for **SC323561**

PKC nu (PRKD3) (NM_005813) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PKC nu (PRKD3) (NM_005813) Human Untagged Clone
Tag:	Tag Free
Symbol:	PKC nu
Synonyms:	EPK2; nPKC-NU; PKC-NU; PKD3; PRKCN
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC323561 sequence for NM_005813 edited (data generated by NextGen Sequencing)

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ATGTCTGCAAATAATCCCCTCCATCAGCCCAGAAGTCTGTATTACCCACAGCTATTCT
GCTGTGCTTCCAGCTGCTTCTCCGTGTTCAAGTCTAAGACGGGACTCTCTGCCCGACTC
TCTAATGGAAGCTTCAGTGCACCATCACTACCAACTCCAGAGGCTCAGTGCATACAGTT
TCATTTCTACTGCAAATTGGCCTCACACGGGAGAGTGTTACCATTGAAGCCCAGGAAGT
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GGATTCTTTGGCATGTATGACAAAATTCTTCTCTTTCCGATGACATGAACTCAGAAAAC
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CTTTAGCTTTAGCCACAGTAGAAGACTTCCAGATTCCGTCACATACTCTCTATGTACAT
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CAAGGACTGAAATGTGAAGGCTGTGGATTAAATTACCATAAACGATGTGCCTTCAAGATT
CCAAATAACTGTAGTGGAGTAAGAAAGAGACGTCTGTCAAATGTATCTTTACCAGGACCC
GGCCTCTCAGTTCGAAGACCCCTACAGCCTGAATATGTAGCCCTTCCCAGTGAAGAGTCA
CATGTCCACCAGGAACCAAGTAAGAGAATTCCTTCTGGAGTGGTCGCCCAATCTGGATG
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CGTCCCACGATATGTCAGTACTGCAAGCGGTTACTGAAAGGCCTCTTTCGCCAAGGAATG
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TGCCTTCTCCAGGGCAAGGAAAGATCACAAAGATTTGTCTACAAGTATCTCTGTATCT
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GATGTGGCTATTAAGTAATTGATAAGATGAGATTCACCAAAAACAAGAAAGTCAACTC
CGTAATGAAGTGCTATTTTACAGAATTTGCACCATCCTGGGATTGTAACCTGGAATGT
ATGTTTGAACCCCGAAGCAGTCTTTGTAGTAATGGAAAAGCTGCATGGAGATATGTTG
GAAATGATTCTATCCAGTGAGAAAAGTCGGCTTCCAGAACGAATTACTAAATTCATGGTC
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ATTTCTGGTGAAGCAATTGATCTGATAAACAATCTGCTTCAAGTGAAGATGAGAAAACGT
TACAGTGTGACAAAATCTTAGTCATCCCTGGCTACAGGACTATCAGACTTGGCTTGC
CTTAGAGAATTTGAAACTCGCATTGGAGAACGTTACATTACACATGAAAGTGATGATGCT
CGCTGGGAAATACATGCATACACACATAACCTTGTATACCCAAAGCACTTCAATTATGGCT
CCTAATCCAGATGATATGGAAGAAGATCCTTAA

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Clone variation with respect to NM_005813.3
934 c=>t;1122 t=>c;1200 a=>c

5' Read Nucleotide Sequence:	>OriGene 5' read for mutant NM_005813 unedited ACCGACCGTTGAAGCAATGGGCGGTAGGCGGTACGGAGGGAGGTCTATATAAGCAGAGCTCGTTTAGTG AACCGTCAGAATTTTGTAAACGACTACTATAGGGCGGCCGGAATTCGGCACGAGCTTTTATTCAATA TGATTTTCCTGAAATTAAGAGACAAGTACAGACTGAAAGGAAAAATAGATTTCGTAATAAGCTACGTCAA CTCTATCCTGCTGAGGATAGCTCAGTGATGTTAAATCCTTTACAAATCCCTGGTTGTCTTCTACAGACA AGACTGCTTTTTGATGGGACTGATATTAAGAGAAAATAGGACCTTTGGGGCATTCAACTCCTTGATAAAAC TTAAAAGTATCGGCATGAGTGGCTTAACAGAGGAAATAAAGAAGTTTTCAACTAAATCCAAAAGTGC CATTTTCTTTACTGCTGTTATTTTAAAAACCTCTTCATAACCATTGAAAAAGATCGACAACACTATTTTAAA AGATTAAGAAAAGGCAGATGTCTGCAAATAATCCCTCCATCAGCCCAGAGTCTGTATTACCCACAGCT ATTCTGCTGTGCTTCCAGCTGCTTCTCGTGTCAAGTCCCTAGACGGACCTCTCTGCCGACTCTCTAATGA AGCTCAGTGGCACATCCCTCACAACCTCAGAAGCTCATGCATACAGTTTCAATTTCTACTGCAAATTGGCCT ACACACGGGAGAGTTGTTAACATTGAGCCAAGGAACCTGTCTTTATCCTGCGTGCAGGATTCTTGTGT GCCTCTATGTTATACAAAGTTCCCGAGGTGGGATTCTTGCCATGTTGCCAATTTTTCTTTGCTGACAT GAATCTTGAACCTTGACCTGTGATATACCTAGCGTGATCCTGAGAGAACCTTGAATGTTGCTAGCTTGC CAGTGAACCTCGAATGCCCACTTTAGACCTCAGCGGCTCAATG
Kinase Domain Sequence:	>SC323561 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation CWCAGTMTGTTTACMGATCTTTCAGATGAGGTGCTTGGTTCAGGCCAGTTTGGCATCGTTTATGGAGGA AAACATAGAAAAGACTGGGAGGGATGTGGCTATTATGGTAATTGATAAGATGAGATTCCCCACAAAACAAG AAAGTCAACTCCGTAATGAAGTGGCTATTTACAGAATTTGCACCATCCTGGGATTGTAACCTGGAATG TATGTTTGAACCCAGAACGAGTCTTTGTAGTAATGAAAAGCT
Restriction Sites:	Please inquire
ACCN:	NM_005813
Insert Size:	6220 bp
OTI Disclaimer:	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).
OTI Annotation:	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." Cell, 2008 May p536-548.
Components:	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).
Reconstitution Method:	<ol style="list-style-type: none"> 1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 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.
RefSeq:	NM_005813.3 , NP_005804.1

RefSeq Size:	5907 bp
RefSeq ORF:	2673 bp
Locus ID:	23683
UniProt ID:	O94806
Cytogenetics:	2p22.2
Domains:	ptkinase, TyrKc, PH, DAG_PE-bind, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Gene Summary:	<p>This gene belongs to the multigene protein kinase D family of serine/threonine kinases, which bind diacylglycerol and phorbol esters. Members of this family are characterized by an N-terminal regulatory domain comprised of a tandem repeat of cysteine-rich zinc-finger motifs and a pleckstrin domain. The C-terminal region contains the catalytic domain and is distantly related to calcium-regulated kinases. Catalytic activity of this enzyme promotes its nuclear localization. This protein has been implicated in a variety of functions including negative regulation of human airway epithelial barrier formation, growth regulation of breast and prostate cancer cells, and vesicle trafficking. [provided by RefSeq, Jan 2015]</p>