

Product datasheet for **RC221309**

PKC nu (PRKD3) (NM_005813) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PKC nu (PRKD3) (NM_005813) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PKC nu
Synonyms:	EPK2; nPKC-NU; PKC-NU; PKD3; PRKCN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RC221309 representing NM_005813
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTCTGCAAATAATCCCTCCATCAGCCAGAAGTCTGTATTACCCACAGCTATTCCTGCTGTGCTTC
 CAGCTGCTTCTCCGTGTTCAAGTCTAAGACGGGACTCTCTGCCGACTCTCTAATGGAAGCTTCAGTGC
 ACCATCACTCACCAACTCCAGAGGCTCAGTGCATACAGTTTCATTTCTACTGCAAATTGGCCTCACACGG
 GAGAGTGTACCATTGAAGCCCAGGAAGTGTCTTTATCTGCTGTCAAGGATCTTGTGTGCTCCATAGTTT
 ATCAAAAGTTTCCAGAGTGTGGATTCTTTGGCATGTATGACAAAAATCTTCTCTTTCCGCATGACATGAA
 CTCAGAAAACATTTTGCAGCTGATTACCTCAGCAGATGAAATACATGAAGGAGACCTAGTGGAAAGTGTT
 CTTTCAGCTTTAGCCACAGTAGAAGACTCCAGATTTCGTCCACATACTCTCTATGTACATTCTTACAAG
 CTCCTACTTTCTGTGATTACTGTGGTGAGATGCTCTGGGGATTGGTACGTCAGGACTGAAATGTGAAGG
 CTGTGGATTAATACCATAAACGATGTGCCTCAAGATTCCAAATAACTGTAGTGGAGTAAAGAAAGAGA
 CGTCTGTCAAATGTATCTTTACCAGGACCCGGCTCTCAGTTCGAAGACCCTACAGCCTGAATATGTAG
 CCCTTCCAGTGAAGAGTCACATGTCCACCAGGAACCAAGTAAGAGAATTCCTTCTTGGAGTGGTCGCC
 AATCTGGATGGAAGAGTGGTAATGTGCAGAGTAAAAGTCCACACACATTTGCTGTTCACTCTTACACC
 CGTCCCACGATATGTCAGTACTGCAAGCGGTTACTGAAAGGCCTCTTTCGCCAAGGAATGCAGTGTAAAG
 ATTGCAAATCAACTGCCATAAATGCTGTGCATCAAAAGTACCAAGAGACTGCCTTGGAGAGGTTACTTT
 CAATGGAGAACCTTCCAGTCTGGGAACAGATACAGATATACCAATGGATATTGACAATAATGACATAAAT
 AGTGATAGTAGTCGGGGTTTGGATGACACAGAAGGCCATCACCCCAAGAGATAAGATGTTCTTCTTGG
 ACCCATCTGATCTCGATGTGAAAGAGATGAAGAAGCCGTTAAAACAATCAGTCCATCAACAAGCAATAA
 TATTCGCTCATGAGGGTTGTACAATCCATCAAGCACACAAGAGGAAGAGCAGCACAATGGTGAAGGAA
 GGGTGGATGGTCCATTACACCAGCAGGGATAACCTGAGAAAAGAGCATTATTGGAGACTTACAGCAAAAT
 GTCTAACATTATTTAGAAATGAATCTGGATCAAAGTATTATAAGGAAAATCCACTTTCAGAAAATTCGG
 CATATCTTACCACGAGATTTACAAAACATTTACAAGGCAGCAATCCACACTGTTTTGAAATCATTACT
 GATACTATGGTATACTTCGTTGGTGAGAACAATGGGGACAGCTCTCATAATCCTGTTCTTGTGCCACTG
 GAGTTGGACTTGTAGCACAGAGCTGGGAAAAAGCAATTCGCCAAGCCCTCATGCCTGTACTCTCTCA
 AGCAAGTGTGGCACTTCTCCAGGGCAAGGAAAGATCACAAAGATTTGTCTACAAGTATCTCTGTATCT
 AATTGTACAGATTCAGGAGAAATGTGGATATCAGTACTGTTTACCAGATCTTTCAGATGAGGTGCTTGGTT
 CAGGCCAGTTTGGCATCGTTTATGGAGGAAAACATAGAAAAGACTGGGAGGGATGTGGCTATTAAGTAAT
 TGATAAGATGAGATTCGCCACAAAACAAGAAAGTCAACTCCGTAATGAAGTGGCTATTTTACAGAATTTG
 CACCATCTGGGATTGTAACCTGGAATGTATGTTTGAACCCCAAGACGAGTCTTTGTAGTAATGGAAA
 AGCTGCATGGAGATATGTTGAAATGATTTCTATCCAGTGAAGAAAGTCGGCTTCCAGAACGAATTAATA
 ATTCATGGTCACACAGATACTTGTGCTTTGAGGAATCTGCATTTTAAGAATATTGTGCACTGTGATTTA
 AAGCCAGAAAATGTGCTGCTTGCATCAGCAGAGCCATTTCCCTCAGGTGAAGCTGTGTGACTTTGGATTTG
 CACGCATCATTGGTAAAAGTCAATCAGGAGATCTGTGGTAGGAACTCCAGCATACTTAGCCCTGAAGT
 TCTCCGGAGCAAAGGTTACAACCGTCCCTAGATATGTGGTCAAGTGGAGTTATCATCTATGTGAGCCTC
 AGTGGCACATTTCTTTTAAATGAGGATGAAGATATAAATGACCAATCCAAAATGCCTGATTTATGTACC
 CACCAAATCCATGGAGAGAAATTTCTGGTGAAGCAATTGATCTGATAAACAATCTGCTTCAAGTGAAGAT
 GAGAAAACGTTACAGTGTGACAAATCTCTTAGTCATCCCTGGCTACAGGACTATCAGACTTGGCTTGC
 CTTAGAGAATTTGAAACTCGCATTGGAGAACGTTACATTACACATGAAAGTATGATGCTCGCTGGGAAA
 TACATGCATACACATAACCTTGTATACCAAAGCACTTCAATTATGGCTCCTAATCCAGATGATATGGA
 AGAAGATCCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC221309 representing NM_005813
 Red=Cloning site Green=Tags(s)

MSANNPPSAQKSVLPTAIPAVLPAASPCSSPKTGLSARLSNGSFSAPSLTNSRGSVHTVSFLLQIGLTR
 ESVTIEAQELSLSAVKDLVCSIVYQKFPECGFFGMYDKILLFRHDMNSENILQLITSADEIHEGDLVEVV
 LSALATVEDFQIRPHTLYVHSYKAPTFCDYCGEMLWGLVRQGLKCEGGLNYHKRCAFKIPNNCSGVRKR
 RLSNVSLPGPGLSVPRPLQPEYVALPSEESHVHQEPSKRIPSWSGRPIWMEKMVMCRVKVPHTFAVHSYT
 RPTICQYCKRLLKGLFRQGMQCKDKCFNCHKCCASKVPRDCLGEVTFNGEPSSLGTDTDIPMDIDNNDIN
 SDSSRGLDDTEEPSPPEDKMFLLDPSDLVERDEEAVKTI SPSTSNNIPLMRVVQS IKHTKRKSSSTMVKE
 GWMVHYTSRDNLKRHYWRLDSKCLTLFQNESGSKYYKEIPLSEILRISSPRDFTNISQGSNPHCFEIT
 DTMVYFVGENGDSSHNPLAATGVGLDVAQSWEKAIRQALMPVTPQASVCTSPGQGDHKLSTISVS
 NCQIQENVDISTVYQIFADEVLGSGQFGIVYGGKHKRKTGRDVAIKVIDKMRFPKQESQLRNEVAILQNL
 HHPGIVNLECMFETPERVFVMEKLGDMLEMLSSEKSRLPERITKFMVTQILVALRNLHFKNIVHCDL
 KPENVLLASAEPFPQVKLCDFGFARIIGEKSFRRSVVGTAYLAPEVLRSGYNRSLDMWSVGVIIYVSL
 SGTFFPNEDEDINDQIQNAAFMYPPNPWREISGEAIDLINLLQVKMRKRYSDKLSLHPWLQDYQTWLD
 LRFETRIGERYITHESDDARWEIHAYTHNLVYPKHFIMAPNPDDMEEDP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3554_c12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

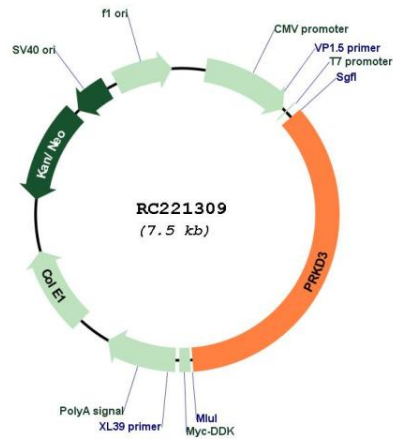


* The last codon before the Stop codon of the ORF

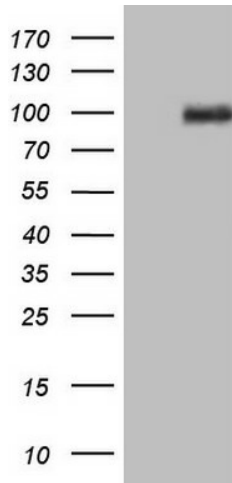
ACCN: NM_005813

ORF Size:	2670 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
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_005813.6
RefSeq Size:	5907 bp
RefSeq ORF:	2673 bp
Locus ID:	23683
UniProt ID:	O94806
Cytogenetics:	2p22.2
Domains:	pkinase, TyrKc, PH, DAG_PE-bind, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
MW:	100.3 kDa
Gene Summary:	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]

Product images:



Circular map for RC221309



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PRKD3 (Cat# RC221309, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PRKD3 (Cat# [TA805724]).