

## Product datasheet for **RC211676**

### PKC mu (PRKD1) (NM\_002742) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PKC mu (PRKD1) (NM_002742) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PKC mu
Synonyms:	CHDED; PKC-MU; PKCM; PKD; PRKCM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide  
Sequence:

>RC211676 representing NM\_002742  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGAGCGCCCCTCCGGTCTGCGGCCGCCAGTCCGCTGCTGCCGTGGCGGCGGCAGCTGCCCGACGGG  
CCGCCGCACTGGTCCCAGGGTCCGGGCCGGGCCCGCCGCTTCTTGGCTCCTGTGCGGGCCCCGGTCGG  
GGGCATCTCGTTCCATCTGCAGATCGGCCCTGAGCCGTGAGCCGGTGTGCTGCTGCAAGACTCGTCCGGG  
GACTACAGCCTGGCGCACGTCCGCGAGATGGCTTGTCCATTGTCGACCAGAAGTCCCTGAATGTGGTT  
TCTACGGAATGTATGATAAGATCCTGCTTTTTCGCCATGACCCTACCTCTGAAAACATCCTTCAGCTGGT  
GAAAGCGGCCAGTGATATCCAGGAAGGCGATCTTATTGAAGTGGTCTTGTGAGCTCCGCCACCTTTGAA  
GACTTTCAGATTCGTCGCCACGCTCTTTTGTTCATTACACAGAGCTCCAGCTTCTGTGATCACTGTG  
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ATGTGCATTTAAAATACCAACAATTGCAGCGGTGTGAGGCGGAGAAGGCTCTCAAACGTTTCCCTCACT  
GGGGTCAGCACCATCCGCACATCATCTGCTGAACCTCTCTACAAGTGCCCTGATGAGCCCTTCTGCAAA  
AATCACCATCAGAGTCGTTTATTGGTCGAGAGAAGAGGTCAAATTCATCATACATTGGACGACCAAT  
TCACCTTGACAAGATTTTGTATGCTAAAGTTAAAGTGCCGCACACATTTGTATCCACTCCTACACCCGG  
CCCACAGTGTGCCAGTACTGCAAGAAGCTTCTGAAGGGGCTTTTCAGGCAGGGCTTGCAGTGCAAGATT  
GCAGATCAACTGCCATAAACGTTGTGCACCGAAAAGTACCAACAACCTGCCTTGGCGAAGTGACCATTAA  
TGGAGATTTGCTTAGCCCTGGGGCAGAGTCTGATGTGGTTCATGGAAGAAGGGAGTGATGACAATGATAGT  
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AGTGCCAGAACGACAGTGGCGAGATGCAAGATCCAGACCCAGACCAGGAGACGCCAACCAACCTCAG  
TCCATCAACAAGCAACAATATCCCACTCATGAGGGTAGTGCAGTCTGTCAAACACACGAAGAGGAAAAGC  
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TGTTTTGAAATCACTACGGCAAATGTAGTGTATTATGTGGGAGAAAATGTGGTCAATCCTTCCAGCCCAT  
CACCAAATAACAGTGTCTCACCAGTGGCGTTGGTGCAGATGTGGCCAGGATGTGGGAGATAGCCATCCA  
GCATGCCCTTATGCCCGTCATCCCAAGGGCTCCTCCGTGGGTACAGGAACCAACTTGCACAGAGATATC  
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TTCTGATGAAGTACTGGGTTCTGGACAGTTTGAATTTTATGGAGGAAAACATCGTAAAACAGGAAAG  
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CGCTTACCTGGCTCCTGAGGTCCTAAGGAACAAGGGCTACAATCGCTCTCTAGACATGGGTCTGTTGGG  
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AGAATGCAGCTTTCATGTATCCACCAAATCCCTGGAAGGAAATATCTCATGAAGCCATTGATCTTATCAA  
CAATTTGCTGCAAGTAAAATGAGAAAGCGCTACAGTGTGGATAAGACCTTGAGCCACCCTTGGCTACAG  
GACTATCAGACCTGGTTAGATTTGCGAGAGCTGGAATGCAAAAATCGGGGAGCGCTACATACCCCATGAAA  
GTGATGACCTGAGGTGGGAGAAGTATGCAGGCGAGCAGGGGCTGCAGTACCCACACACCTGATCAATCC  
AAGTGCTAGCCACAGTGACACTCCTGAGACTGAAGAAACAGAAAATGAAAGCCCTCGGTGAGCGTGCAGC  
ATCCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGAT AAGGTTTAA

**Protein Sequence:** >RC211676 representing NM\_002742  
 Red=Cloning site Green=Tags(s)

MSAPPVLRPPSPLLPVAIAAAAAAAAAALVPGSGPGPAPFLAPVAAPVGGISFHLQIGLSREPVLQLQDSSG  
 DYSLAHVREMACSIVDQKFPECGFYGMYDKILLFRHDPTSENIQLVKAASDIQEGDLIEVVLASATFE  
 DFQIRPHALFVHSYRAPAFCDHCGEMLWGLVRQGLKCEGCLNYHKRCFAKIPNNCSGVRRRRLSNVSLT  
 GVSTIRSSAELSTSAPDEPLLQKSPSESFIGREKRSNSQSYIGRPIHLDKILMSKVVPHTFVIHSYTR  
 PTVCQYCKLLKGLFRQGLQCKDCRFNCHKRCAPKVPNNCLGEVTINGDLLSPGAESDVVMEEGSDNDNS  
 ERNSGLMDDMEEAMVQDAEMAMAECQNDSGEMQDPDPDHEDANRTISPSTSNNIPLMRVVQSVKHTKRKS  
 STVMKEGWMVHYTSKDTLRKRHYWRLDSKCITLFDQNDTGSRYYEIPLSEILSLEPVKTSALIPNGANPH  
 CFEITANVVVVYGENVNPSSPSPNNSVLTSGVGADVARMWEIAIQHALMPVIPKSSVGTGTNLHRDI  
 SVSISVNSCQIQENVDISTVYQIFPDEVLGSGQFGIVYGGKHKRTGRDVAIKIIDKLRFPKQESQLRNE  
 VAILQNLHHPGVNLECMFETPERVVFVMEKLGDMLEMILSSEKGRLEPHITKFLITQILVALRHLHFK  
 NIVHCDLKPENVLLASADFPQVKLCDFGFARIIGEKSFRRSVVGTTPAYLAPEVLRNKGYNRSLDMWSVG  
 VIIYVSLSGTFPFNEDEDIHDQIQNAAFMYPPNPWKEISHEAIDLINLLQVKMRKRYSDKTLSPWLVQ  
 DYQTWLTLRELECKIGERYITHESDDLWEKYAGEQGLQYPTHLINPSASHSDTPETEEMKALGERV  
 IL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6237\\_e05.zip](https://cdn.origene.com/chromatograms/mk6237_e05.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



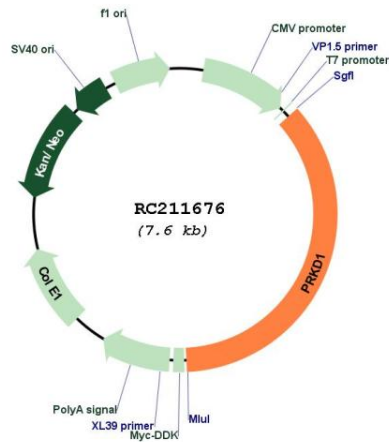
\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_002742

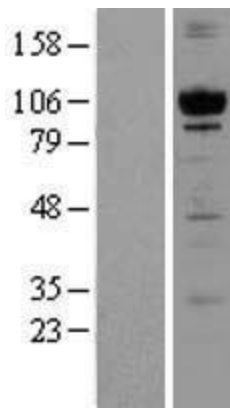
**ORF Size:** 2736 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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_002742.3</a>
<b>RefSeq Size:</b>	3742 bp
<b>RefSeq ORF:</b>	2739 bp
<b>Locus ID:</b>	5587
<b>UniProt ID:</b>	<a href="#">Q15139</a>
<b>Cytogenetics:</b>	14q12
<b>Domains:</b>	ppkinase, TyrKc, PH, DAG_PE-bind, S_TKc
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>MW:</b>	101.5 kDa
<b>Gene Summary:</b>	The protein encoded by this gene is a serine/threonine protein kinase involved in many cellular processes, including Golgi body membrane integrity and transport, cell migration and differentiation, MAPK8/JNK1 and Ras pathway signaling, MAPK1/3 (ERK1/2) pathway signaling, cell survival, and regulation of cell shape and adhesion. [provided by RefSeq, Jan 2017]

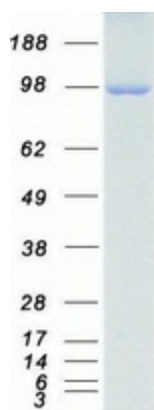
Product images:



Circular map for RC211676



Western blot validation of overexpression lysate (Cat# [LY419136]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211676 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PRKD1 protein (Cat# [TP311676]). The protein was produced from HEK293T cells transfected with PRKD1 cDNA clone (Cat# RC211676) using MegaTran 2.0 (Cat# [TT210002]).