

Product datasheet for **RC221498**

Protein Kinase D2 (PRKD2) (NM_001079881) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Protein Kinase D2 (PRKD2) (NM_001079881) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Protein Kinase D2
Synonyms:	HSPC187; nPKC-D2; PKD2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC221498 representing NM_001079881
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCCACCGCCCCCTTTATCCCGCCGGGCTCCCTGGCTCTCCCGGCCGGGTCTCCTCCGCCCCCG
 GCGGCCTAGAGCTGCAGTCGCCGCCACCGCTACTGCCCCAGATCCCGGCCCGGGTTCGGGGTCTCCTT
 TCACATCCAGATCGGGCTGACCCGCGAGTTCGTGCTGTTGCCCGCCGCTCCGAGCTGGCTCATGTGAAG
 CAGCTGGCCTGTTCCATCGTGGACCAGAAGTTCCTGAGTGTGGCTTCTACGGCCTTTACGACAAGATCC
 TGCTTTTCAAACATGACCCACGTCGGCCAACCTCCTGCAGCTGGTGGCTCGTCCGGAGACATCCAGGA
 GGGCGACTGGTGGAGGTGGTGTGTGGCCTCGGCCACCTTCGAGGACTTCAGATCCGCCCGCACGCC
 CTCACGGTGCCTCTATCGGGCCTGCCTTCTGTGATCACTGCGGGGAGATGCTCTTCGGCCTAGTGC
 GCCAGGGCCTCAAGTGCATGGTGGGGCTGAACACCACAAGCGCTGTGCCTCAGCATCCCCAACAA
 CTGTAGTGGGGCCGCAAACGGCGCCTGTCATCCACGTCTCTGGCCAGTGGCCACTCGGTGCGCCTCGGC
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 CCCCCTCATCCTTCTCCTCTTCTGCCTCATCGTATACGGGCCGCCCCATTGAGCTGGACAAGATGCT
 GCTCTCAAGGTCAAGGTGCCGCACACCTTCTCATCCACAGCTATACACGGCCACCGTTTGCCAGGCT
 TGCAAGAACTCCTCAAGGGCCTTTCGGCAGGGCCTGCAATGCAAAGACTGCAAGTTAACTGTCACA
 AACGCTGCGCCACCCGCTCCCTAATGACTGCCTGGGGGAGGCCCTTATCAATGGAGATGTGCCGATGGA
 GGAGGCCACCGATTTAGCGAGGCTGACAAGAGCGCCCTCATGGATGAGTCAAGGACTCCGGTGTATC
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 GCTCCCTGGGGTACATCCCCCTAATGAGGGTGGTCAATCGGTGCGACACACGACGCGGAAATCCAGCA
 CACGCTGCGGGAGGGTGGGTGGTTCATTACAGCAACAAGGACACGCTGAGAAAGCGGCACTATTGGCGC
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 CAGAAATCCTCACGGTGGAGTCCGCCAGAATTCAGCCTTGTGCCGCGGGCACCAACCCACACTGCTT
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 TCCCGGGATCGTGAACCTGGAGTGCATGTTGAGACGCCTGAGAAAGTGTGGTGGTGGTGGAGAAGCTG
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 TCATCACCCAGATCCTGGTGGCTTTGAGACACCTTCACTTCAAGAACATTGTCCACTGTGACTTGAACCC
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC221498 representing NM_001079881
 Red=Cloning site Green=Tags(s)

MATAPSYAGLPGSPGPGSPPPPGGLELQSPPLLPQIPAPGSGVSFHIQIGLTRETVLLPAASELAHVK
 QLACSIDVQKFPCEGFYGLYDKILLFKHDPTSANLLQLVRSSGDIQEGDLVEVLSASATFEDFQIRPHA
 LTVHSYRAPAFCDHCGEMLFGLVRQGLKCDGCGLNHYHKRCASFIPNNCSGARKRRLSSTSLASGHSVRLG
 TSESLPCTAEELSRSTTELLPRRPPSSSSSSASSYGRPIELDKMLLSKVVPHTFLIHSYTRPTVCQA
 CKKLLKGLFRQGLQCKDKFNCHKRCATRVNDCLGEALINGDVPMEEDDFSEADKSALMDESEDSGVI
 PGSHSENALHASEEEEEEGGKAQSSSLGYIPLMRVVQSVRHTTRKSSTTLREGVWVHYSNKDTLRKRHYWR
 LDCKCITLQFNNTTNRYYKEIPLSEILTVESAQNFLVPPGTNPHCFEIVTANATYFVGEMPGGTPGGPS
 GQGAEAARGWETAIRQALMPVILQDAPSAPGHAPHRQASLSISVNSQIQENVDIATVYQIFPDEVLGSG
 QFGVVYGGKHKRKTGRDVAVKVIDKLRFPKQESQLRNEVAIQSLRHPGIVNLECMFETPEKVFVMEKL
 HGDMLEMILSSEKGRLEPERLTKFLITQILVALRHLHFKNIVHCDLKPENVLLASADFPQVKLCDFGFAR
 IIGKSFRRSVVGTPAYLAPEVLLNQGYNRSLDMWSVGVIMYVLSGTFPFNEDEDINDQIQNAAFMYPA
 SPWSHISAGAIDLINLLQVKMRKRYSDKSLSHPWLQEYQTWLDLRELEGKMGERYITHESDDARWEQF
 AAEHPLPGSGLPTDRDLGGACPPQDHDMDQGLAERISVL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6166_g10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

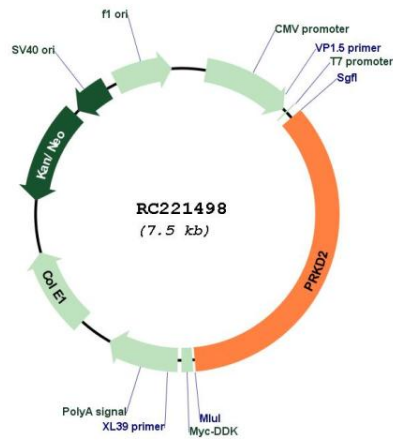
Cloning sites used for ORF Shuttling:



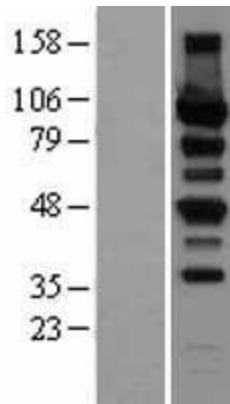
* The last codon before the Stop codon of the ORF

ACCN:	NM_001079881
ORF Size:	2634 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_001079881.1 , NP_001073350.1
RefSeq Size:	3202 bp
RefSeq ORF:	2637 bp
Locus ID:	25865
UniProt ID:	Q9BZL6
Cytogenetics:	19q13.32
Protein Families:	Druggable Genome, Protein Kinase
MW:	96.5 kDa
Gene Summary:	The protein encoded by this gene belongs to the protein kinase D (PKD) family of serine/threonine protein kinases. This kinase can be activated by phorbol esters as well as by gastrin via the cholecystokinin B receptor (CCKBR) in gastric cancer cells. It can bind to diacylglycerol (DAG) in the trans-Golgi network (TGN) and may regulate basolateral membrane protein exit from TGN. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]

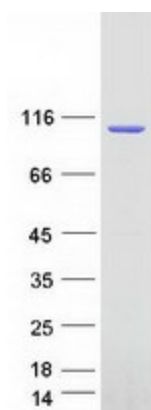
Product images:



Circular map for RC221498



Western blot validation of overexpression lysate (Cat# [LY421575]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221498 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PRKD2 protein (Cat# [TP321498]). The protein was produced from HEK293T cells transfected with PRKD2 cDNA clone (Cat# RC221498) using MegaTran 2.0 (Cat# [TT210002]).