

Product datasheet for **RC215335**

Protein Kinase D2 (PRKD2) (NM_016457) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Protein Kinase D2 (PRKD2) (NM_016457) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PRKD2
Synonyms:	HSPC187; nPKC-D2; PKD2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC215335 representing NM_016457
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCCACCGCCCCCTTTATCCCGCCGGGCTCCCTGGCTCTCCCGGCCGGGTCTCCTCCGCCCCCG
 GCGGCCTAGAGCTGCAGTCGCCGCCACCGCTACTGCCCCAGATCCCGGCCCGGGTTCGGGGTCTCCTT
 TCACATCCAGATCGGGCTGACCCGCGAGTTCGTGCTGTTGCCCGCCGCTCCGAGCTGGCTCATGTGAAG
 CAGCTGGCCTGTTCCATCGTGGACCAGAAGTTCCTGAGTGTGGCTTCTACGGCCTTTACGACAAGATCC
 TGCTTTTCAAACATGACCCACGTCGGCCAACCTCCTGCAGCTGGTGGCTCGTCCGGAGACATCCAGGA
 GGGCGACTGGTGGAGGTGGTGTGTGGCCTCGGCCACCTTCGAGGACTTCAGATCCGCCCGCACGCC
 CTCACGGTGCCTCTATCGGGCCTGCCTTCTGTGATCACTGCGGGGAGATGCTCTTCGGCCTAGTGC
 GCCAGGGCCTCAAGTGCATGGTGGGGCTGAACACCACAAGCGCTGTGCCTCAGCATCCCCAACAA
 CTGTAGTGGGGCCGCAAACGGCGCTGTATCCACGTCTCTGGCCAGTGGCCACTCGGTGCGCCTCGGC
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 CCCCCTCATCCTTCTCCTCTTCTGCCTCATCGTATACGGGCCGCCCATGAGCTGGACAAGATGCT
 GCTCTCAAGGTCAAGGTGCCGCACACCTTCTCATCCACAGCTATACACGGCCACCGTTTGCCAGGCT
 TGCAAGAACTCCTCAAGGGCCTTCCGGCAGGGCCTGCAATGCAAAGACTGCAAGTTAACTGTCACA
 AACGCTGCGCCACCCGCTCCCTAATGACTGCCTGGGGGAGGCCCTTATCAATGGAGATGTGCCGATGGA
 GGAGGCCACCGATTTAGCGAGGCTGACAAGAGCGCCCTCATGGATGAGTCAAGGACTCCGGTGTATC
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 GCTCCCTGGGGTACATCCCCCTAATGAGGTGGTCAATCGGTGCGACACACGACGCGGAAATCCAGCA
 CACGCTGCGGGAGGGTGGGTGGTTCATTACAGCAACAAGGACACGCTGAGAAAGCGGCACTATTGGCGC
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 TCAGATCCAAGAGAATGTGGACATTGCCACTGTCTACCAGATCTCCCTGACGAAGTGTGGGCTCAGGG
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC215335 representing NM_016457
 Red=Cloning site Green=Tags(s)

MATAPSYAGLPGSPGPGSPPPPGGLELQSPPLLPQIPAPGSGVSFHIQIGLTREFVLLPAASELAHVK
 QLACSIVDQKFPECGFYGLYDKILLFKHDPTSANLLQLVRSSGDIQEGDLVEVLSASATFEDFQIRPHA
 LTVHSYRAPAFCDHCGEMLFGLVRQGLKCDGCGLNHYHKRCASFIPNNCSGARKRRLSSTSLASGHSVRLG
 TSESLPCTAEELSRSTTELLPRRPPSSSSSSASSYGRPIELDKMLLSKVVPHTFLIHSYTRPTVCQA
 CKKLLKGLFRQGLQCKDKFNCHKRCATRVNDCLGEALINGDVPMEEDDFSEADKSALMDESEDSGVI
 PGSHSENALHASEEEEEEGGKAQSSSLGYIPLMRVVQSVRHTTRKSSTTLREGVWVHYSNKDTLRKRHYWR
 LDCKCITLQFNNTTNRYYKEIPLSEILTVESAQNFLVPPGTNPHCFEIVTANATYFVGEMPGGTPGGPS
 GQGAEAARGWETAIRQALMPVILQDAPSAPGHAPHRQASLSISVNSQIQENVDIATVYQIFPDEVLGSG
 QFGVVYGGKHKRKTGRDVAVKVIDKLRFPKQESQLRNEVAIQSLRHPGIVNLECMFETPEKVFVMEKL
 HGDMLEMILSSEKGRLEPERLTKFLITQILVALRHLHFKNIVHCDLKPENVLLASADFPQVKLCDFGFAR
 IIGKSFRRSVVGTPAYLAPEVLLNQGYNRSLDMWSVGVIMYVLSGTFPFNEDEDINDQIQNAAFMYPA
 SPWSHISAGIDLINLLQVKMRKRYSDKSLSHPWLQEYQTWLDLRELEGKMGERYITHESDDARWEQF
 AAEHPLPGSGLPTDRDLGGACPPQDHDMDQGLAERISVL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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

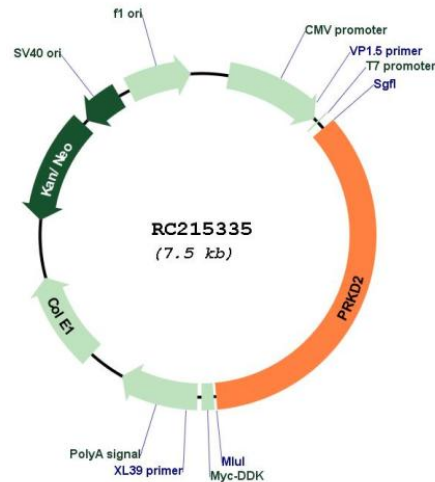
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_016457

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:

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_016457.5](#)

RefSeq Size: 2883 bp

RefSeq ORF: 2637 bp

Locus ID: 25865

UniProt ID: [Q9BZL6](#)

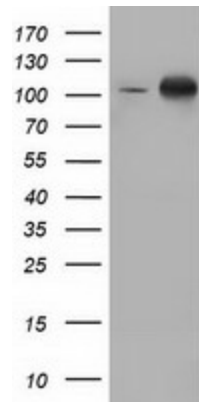
Cytogenetics: 19q13.32

Protein Families: Druggable Genome, Protein Kinase

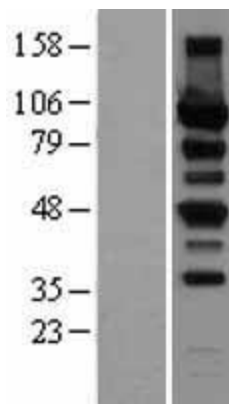
MW: 96.5 kDa

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 cholecystinin 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]

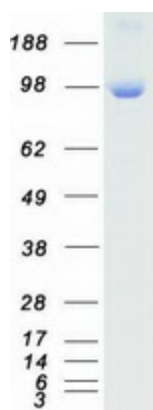
Product images:



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PRKD2 (Cat# RC215335, 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-PRKD2 (Cat# [TA501672]). Positive lysates [LY402555] (100ug) and [LC402555] (20ug) can be purchased separately from OriGene.



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# [TP315335]). The protein was produced from HEK293T cells transfected with PRKD2 cDNA clone (Cat# RC215335) using MegaTran 2.0 (Cat# [TT210002]).