

## Product datasheet for **RG221498**

### 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:	TurboGFP
Symbol:	PRKD2
Synonyms:	HSPC187; nPKC-D2; PKD2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG221498 representing NM\_001079881  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCCACCGCCCCCTTTATCCCGCCGGGCTCCCTGGCTCTCCCGGGCCGGGTCTCCTCCGCCCCCG  
 GCGGCCTAGAGCTGCAGTCGCCGCCACCGCTACTGCCCCAGATCCCGGCCCGGGTTCGGGGTCTCCTT  
 TCACATCCAGATCGGGCTGACCCGCGAGTTCGTGCTGTTGCCCGCCGCTCCGAGCTGGCTCATGTGAAG  
 CAGCTGGCCTGTTCCATCGTGGACCAGAAGTTCCTGAGTGTGGCTTCTACGGCCTTTACGACAAGATCC  
 TGCTTTTCAAACATGACCCACGTCGGCCAACCTCCTGCAGCTGGTGGCTCGTCCGGAGACATCCAGGA  
 GGGCGACTGGTGGAGGTGGTGTGTGGCCTCGGCCACCTTCGAGGACTTCAGATCCGCCCGCACGCC  
 CTCACGGTGCCTCTATCGGGCCTGCCTTCTGTGATCACTGCGGGGAGATGCTCTTCGGCCTAGTGC  
 GCCAGGGCCTCAAGTGCATGGTGGGGCTGAACACCACAAGCGCTGTGCCTTCAGCATCCCCAACAA  
 CTGTAGTGGGGCCGCAAACGGCGCTGTATCCACGTCTCTGGCCAGTGGCCACTCGGTGCGCCTCGGC  
 ACCTCCGAGTCCCTGCCCTGCACGGCTGAAGAGCTGAGCCGTAGCACCACCGAACTCCTGCCTCGCCGTC  
 CCCCCTCATCCTTCTCCTCTTCTGCCTCATCGTATACGGGCCGCCCCATTGAGCTGGACAAGATGCT  
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 TGCAAGAACTCCTCAAGGGCCTTCCGGCAGGGCCTGCAATGCAAAGACTGCAAGTTAACTGTCACA  
 AACGCTGCGCCACCCGCGTCCCTAATGACTGCCTGGGGGAGGCCCTTATCAATGGAGATGTGCCGATGGA  
 GGAGGCCACCGATTTTACGCGAGGCTGACAAGAGCGCCCTCATGGATGAGTCAAGGACTCCGGTGTATC  
 CCTGCTCCCACTCAGAGAATGCGCTCCACGCCAGTGGAGGAGGAAGCGAGGGAGGCAAGGCCCAGA  
 GCTCCCTGGGGTACATCCCCCTAATGAGGTGGTCAATCGGTGCGACACACGACGCGGAAATCCAGCA  
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 GGGCAGGGGGCTGAGGCCGCCGGGGCTGGGAGACAGCCATCCGCCAGGCCCTGATGCCCGTATCCTTC  
 AGGACGCACCCAGCGCCCAGGCCACGCCCCACAGACAAGCTTCTCTGAGCATCTCTGTGTCCAACAG  
 TCAGATCCAAGAGAATGTGGACATTGCCACTGTCTACCAGATCTCCCTGACGAAGTGTGGCTCAGGG  
 CAGTTTGGAGTGGTCTATGGAGGAAAACACCGGAAGACAGGCCGGGACGTGGCAGTTAAGTTCATTGACA  
 AACTGCGCTTCCCTACCAAGCAGGAGAGCCAGCTCCGGAATGAAGTGGCCATTCTGCAGAGCCTGCGGCA  
 TCCCGGGATCGTGAACCTGGAGTGCATGTTGAGACGCCTGAGAAAGTGTGGTGGTGGTGGAGAAGCTG  
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 TCATCACCCAGATCCTGGTGGCTTTGAGACACCTTCACTTCAAGAACATTGTCCACTGTGACTTGAACCC  
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 ATCATCGCGGAGAAGTCGTTCCGCCGCTCAGTGGTGGGCACGCCGGCCTACCTGGCACCCGAGGTGCTGC  
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 GCAGCAGAGCATCCGCTGCCTGGTCTGGGCTGCCACGGACAGGGATCTCGGTGGGGCTGTCCACCAC  
 AGGACCACGACATGCAGGGGCTGGCGGAGCGCATCAGTGTCTC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG221498 representing NM\_001079881  
 Red=Cloning site Green=Tags(s)

MATAPSYAGLPGSPGPGSPPPPGGLELQSPPLLPQIPAPGSGVSFHIQIGLTREFVLLPAASELAHVK  
 QLACSIDVQKFPCEGFYGLYDKILLFKHDPTSANLLQLVRSSGDIQEGDLVEVLSASATFEDFQIRPHA  
 LTVHSYRAPAFCDHCGEMLFGLVRQGLKCDGCLNYHKRCAF SIPNNCSGARKRRLSSTSLASGHSVRLG  
 TSESLPCTAEELSRSTTELLPRRPPSSSSSSASSYTGRPIELDKMLLSKVVPHTFLIHSYTRPTVCQA  
 CKLLKGLFRQGLQCKDKFNCHKRCATRVNDCLGEALINGDVPMEEATDFSEADKSALMDESEDSGVI  
 PGSHSENALHASEEEEEEGGKAQSSLGYIPLMRVVQSVRHTTRKSSTTLREGWVHYSNKDTLRKRHYWR  
 LDCKCITLFQNNTTNRYEKEIPLSEILTVESAQNFLVPPGTNPHCFEIVTANATYFVGEMPGGTPGGPS  
 GQGAEAARGWETAIRQALMPVILQDAPSAPGHAPHRQASLSISVNSQIQENVDIATVYQIFPDEVLGSG  
 QFGVVYGGKHKRTGRDVAVKVIDKLRFP TKQESQLRNEVAIQLSLRHPGIVNLECMFETPEKVFVMEKL  
 HGDMLEMILSSEKGRLEPERLTKFLITQILVALRHLHFKNIVHCDLKPENVLLASADFPQVKLCDFGFAR  
 IIGKSFRRSVVGTPAYLAPEVLLNQGYNRS LDMWSVGVIMYVLSGTFPFNEDEDINDQIQNAAFMYPA  
 SPWSHISAGIDLINLLQVKMRKRYSDKSLSHPWLQEYQTWLDLRELEGKMGERYITHE SDDARWEQF  
 AAEHPLPGSGLPTDRDLGGACPPQDHD MQGLAERISVL

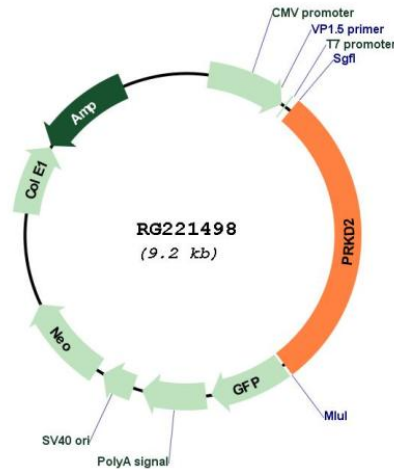
TRTRPLE - GFP Tag - V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**


**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:**

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

**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]