

Product datasheet for **RG221442**

Protein Kinase D2 (PRKD2) (NM_001079880) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Protein Kinase D2 (PRKD2) (NM_001079880) 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)



[View online »](#)

ORF Nucleotide Sequence:

>RG221442 representing NM_001079880
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCCACCGCCCCCTTTATCCCGCCGGGCTCCCTGGCTCTCCCGGCCGGGTCTCCTCCGCCCCCG
 GCGGCCTAGAGCTGCAGTCGCCGCCACCGCTACTGCCCCAGATCCCGGCCCGGGTTCGGGGTCTCCTT
 TCACATCCAGATCGGGCTGACCCGCGAGTTCGTGCTGTTGCCCGCCGCTCCGAGCTGGCTCATGTGAAG
 CAGCTGGCCTGTTCCATCGTGGACCAGAAGTTCCTGAGTGTGGCTTCTACGGCCTTTACGACAAGATCC
 TGCTTTTCAAACATGACCCACGTCGGCCAACCTCCTGCAGCTGGTGGCTCGTCCGGAGACATCCAGGA
 GGGCGACTGGTGGAGGTGGTGTGTGGCCTCGGCCACCTTCGAGGACTTCAGATCCGCCCGCACGCC
 CTCACGGTGCCTCTATCGGGCCTGCCTTCTGTGATCACTGCGGGGAGATGCTCTTCGGCCTAGTGC
 GCCAGGGCCTCAAGTGCATGGTGGGGCTGAACACCACAAGCGCTGTGCCTCAGCATCCCCAACAA
 CTGTAGTGGGGCCGCAAACGGCGCCTGTCATCCACGTCTCTGGCCAGTGGCCACTCGGTGCGCCTCGGC
 ACCTCCGAGTCCCTGCCCTGCACGGCTGAAGAGCTGAGCCGTAGCACCACCGAACTCCTGCCTCGCCGTC
 CCCCCTCATCCTTCTCCTCTTCTGCCTCATCGTATACGGGCCGCCCCATTGAGCTGGACAAGATGCT
 GCTCTCAAGGTCAAGGTGCCGCACACCTTCTCATCCACAGCTATACACGGCCACCGTTTGCCAGGCT
 TGCAAGAAACTCCTCAAGGGCCTTCCGGCAGGGCCTGCAATGCAAAGACTGCAAGTTTAACTGTCACA
 AACGCTGCGCCACCCGCGTCCCTAATGACTGCCTGGGGGAGGCCCTTATCAATGGAGATGTGCCGATGGA
 GGAGGCCACCGATTTTACGCGAGGCTGACAAGAGCGCCCTCATGGATGAGTCAAGGACTCCGGTGTATC
 CCTGCTCCCACTCAGAGAATGCGCTCCACGCCAGTGGAGGAGGAAGCGAGGGAGGCAAGGCCCAGA
 GCTCCCTGGGGTACATCCCCCTAATGAGGGTGGTCAATCGGTGCGACACACGACGCGGAAATCCAGCA
 CACGCTGCGGGAGGGTGGGTGGTTCATTACAGCAACAAGGACACGCTGAGAAAGCGGCACTATTGGCGC
 CTGGACTGCAAGTGTATCACGCTTCCAGAACAACACGACCAACAGATACTATAAGGAAATTCGCTGT
 CAGAAATCCTCACGGTGGAGTCCGCCAGAATTGAGCCTTGTGCCCGGGGACCAACCCACACTGCTT
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 GGGCAGGGGGTGGAGCCCGGGGGTGGGAGACAGCCATCCGCCAGGCCCTGATGCCCGTATCCTTC
 AGGACGCACCCAGCGCCCAGGCCACGCCCCACAGACAAGCTTCTCTGAGCATCTCTGTGTCCAACAG
 TCAGATCCAAGAGAATGTGGACATTGCCACTGTCTACCAGATCTCCCTGACGAAGTGTGGGCTCAGGG
 CAGTTTGGAGTGGTCTATGGAGGAAAACACCGGAAGACAGGCCGGGACGTGGCAGTTAAGTTCATTGACA
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 TCCCGGGATCGTGAACCTGGAGTGCATGTTGAGACGCCTGAGAAAGTGTGGTGGTGGTGGAGAAGCTG
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 TCATCACCCAGATCCTGGTGGCTTTGAGACACCTTCACTTCAAGAACATTGTCCACTGTGACTTGAACCC
 AGAAAACGTGTTGCTGGCATCAGCAGACCCATTTCCCTCAGGTGAAGTGTGTGACTTTGGCTTTGCTCGC
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 CACCTTCCCTTTCAACGAGGATGAGGACATCAATGACCAGATCCAGAACGCCCGCCTCATGTACCCGGCC
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 AACGCTACAGCGTGGACAAATCTCTCAGCCACCCCTGGTTACAGGAGTACCAGACGTGGCTGGACCTCCG
 AGAGCTGGAGGGGAAGATGGGAGAGCGATACATCACGCATGAGAGTGACGACGCGCCTGGGAGCAGTTT
 GCAGCAGAGCATCCGCTGCCTGGTCTGGGCTGCCACGGACAGGGATCTCGGTGGGGCTGTCCACCAC
 AGGACCACGACATGCAGGGGCTGGCGGAGCGCATCAGTGTCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG221442 representing NM_001079880
 Red=Cloning site Green=Tags(s)

MATAPSYAGLPGSPGPGSPPPPGGLELQSPPLLPQIPAPGSGVSFHIQIGLTREFVLLPAASELAHVK
 QLACSIDVQKFPCEGFYGLYDKILLFKHDPTSANLLQLVRSSGDIQEGDLVEVLSASATFEDFQIRPHA
 LTVHSYRAPAFCDHCGEMLFGLVRQGLKCDGCLNYHKRCAF SIPNNCSGARKRRLSSTSLASGHSVRLG
 TSESLPCTAEELSRSTTELLPRRPPSSSSSSASSYTGRPIELDKMLLSKVVPHTFLIHSYTRPTVCQA
 CKLLKGLFRQGLQCKDKFNCHKRCATRVNDCLGEALINGDVPMEEATDFSEADKSALMDESEDSGVI
 PGSHSENALHASEEEEEEGGKAQSSLGYIPLMRVVQSVRHTTRKSSTTLREGVWVHYSNKDTLRKRHYWR
 LDCKCITLFQNNTTNRYIKEIPLSEILTVESAQNFLVPPGTNPHCFEIVTANATYFVGEMPGGTPGGPS
 GQGAEAARGWETAIRQALMPVILQDAPSAPGHAPHRQASLSISVNSQIQENVDIATVYQIFPDEVLGSG
 QFGVVYGGKHKRKTGRDVAVKVIDKLRFP TKQESQLRNEVAI LQSLRHPGIVNLECMFETPEKVFVMEKL
 HGDMLEMILSSEKGR LPERLTKFLITQILVALRHLHFKNIVHCDLKPENVLLASADFPQVKLCDFGFAR
 IIGKSFRRSVVGT PAYLAPEVLLNQGYNRS LDMWSVGVIMYVSLSGTFPFNEDEDINDQIQNAAFMYPA
 SPWSHISAGIDLINLLQVKMRKRYSDKSLSHPWLQEYQTWLDLRELEGKMGERYITHESDDARWEQF
 AAEHPLPGSGLPTDRDLGGACPPQDHD MQGLAERISVL

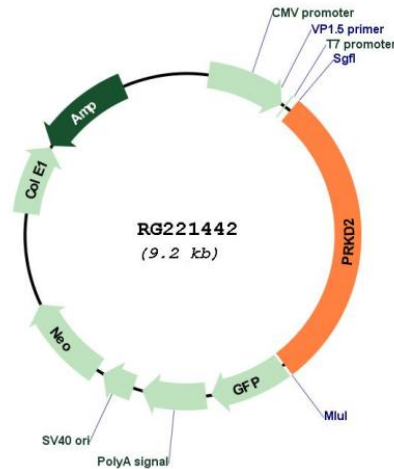
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001079880

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_001079880.1](#), [NP_001073349.1](#)

RefSeq Size: 3338 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]