

Product datasheet for **RC237587**

CGK2 (PRKG2) (NM_001282481) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: CGK2 (PRKG2) (NM_001282481) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: PRKG2
Synonyms: cGK2; cGKII; PKG2; PRKGR2
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC237587 representing NM_001282481
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGGATCGCC

ATGTCTAACTGGAAGCTGTCCAAAGCACTCTCTGAAATGATTCAGCTGAAGGAGAAGGTGGCCAGAT
 TTTCTCATCATCCCATCCAGAACCTTGAGATTATTGCAACTGGGCGTTGGTGGGTTCCGGAAGAGT
 TGAGCTTGTTAAAGTAAAAATGAGAATGTTGCTTTTGTATGAAGTGATAAGGAAGAAGCACATAGTT
 GACACCAAGCAGCAGGAGCATGTCTACTCAGAGAAGAGGATCCTAGAGGAGCTGTCTCCATTATTG
 TGAAATTATATCGTACTTTCAAGGACAATAAGTATGTATACATGCTTCTGGAGGCCTGCTTAGGTGGGA
 GCTCTGGAGTATATTAAGGGACAGAGGCAGCTTTGATGAACCCACCTCCAAATTCGCGTTGCTTGTGTG
 ACAGAAGCATTGATTACCTGCATCGACTAGGTATTATCTACAGAGACTTGAAACCAGAAAACTTAATTC
 TAGATGCTGAGGGTTACCTAAATTGGTTGACTTTGGATTTGCGAAGAAAATAGGGTCTGGACAGAAAAC
 ATGGACATTCTGTGGGACTCCAGAATATGTAGCTCCTGAAGTCATTCTCAACAAGGGACATGACTTCAGT
 GTGGATTTCTGGTCACTGGGAATCTAGTGTATGAGCTCCTAACGGGCAACCCACCCTTTCTGGGGTTG
 ACCAAATGATGACCTACAATTTGATTCTCAAAGGAATTGAAAAATGGATTTTCCAGGAAGATAACACAG
 ACGACTGAGGATTTGATTCGGAGGCTTTGCAGGCAAAATCCAACAGAAAGGCTGGGAAATCTGAAGAAT
 GGAATAAATGACATTAAGAAACACAGGTGGTTAAATGGTTTTAATGGGAGGGACTGAAAGCACGGAGCC
 TTCCATCACCTTTGCAAAGAGAGCTCAAGGGACCCATAGATCACAGCTACTTTGACAAATATCCTCCTGA
 AAAGGGAATGCCTCCAGATGAGCTATCAGGCTGGGATAAAGACTTC

ACGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC237587 representing NM_001282481
 Red=Cloning site Green=Tags(s)

MSNWKLSKALSLEMIQLKEKVARFSSSSPFQNL EIIATLGVGGFGRVELVKVKNENVAFAMK CIRKKHIV
 DTKQQEHVYSEKRILEELCSPFIVKLYRTFKDNKYVYMLLEACLGGELWSILRDRGSFDEPTSKFCVACV
 TEAFDYLHRLGI IYRDLKPENLILDAEGYLKLVDFGFAKKIGSGQKTWTF CGTPEYVAPEVILNKGHDFS
 VDFWSLGILVYELLTGNPPFSGVDQMMTYNLILKGI EKMDFPK ITRRPEDLIRRLCRQNP TERLGNLKN
 GIINDIKKRWLNGFNWEGLKARSLP SPLQRELKGPIDHSYFDKYPPEKGMPPDEL SGWDKDF

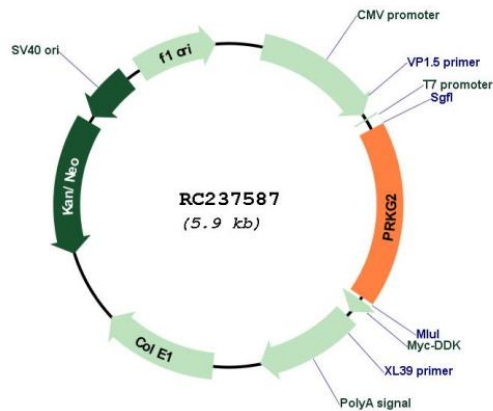
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001282481

ORF Size: 1026 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_001282481.1 , NP_001269410.1
RefSeq Size:	3771 bp
RefSeq ORF:	1029 bp
Locus ID:	5593
UniProt ID:	Q13237
Cytogenetics:	4q21.21
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Gap junction, Long-term depression, Olfactory transduction
MW:	39.9 kDa
Gene Summary:	This gene encodes a protein that belongs to the serine/threonine protein kinase family of proteins. The encoded protein binds to and inhibits the activation of several receptor tyrosine kinases. The membrane-bound protein is a regulator of intestinal secretion, bone growth and renin secretion. Alternate splicing results in multiple transcript variants encoding distinct isoforms whose regulatory N-termini differ in length but whose C-terminal catalytic domains are identical. [provided by RefSeq, May 2018]