

## Product datasheet for **RC237586**

### **CGK2 (PRKG2) (NM\_001282480) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** CGK2 (PRKG2) (NM\_001282480) 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:** >RC237586 representing NM\_001282480  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGTCTAACTGGAAGCTGTCAAAGCACTCTCTGGAATGATTCAGCTGAAGGAGAAGGTGGCCAGAT  
TTTCCTCATCATCCCATCCAGAACCTTGAGATTATTGCAACTGGCGTTGGTGGGTTCCGGAAGAGT  
TGAGCTTGTTAAAGTAAAAATGAGAATGTTGCTTTTGCTATGAAGTGATAAGGAAGAAGCACATAGTT  
GACACCAAGCAGCAGGAGCATGTCTACTCAGAGAAGAGGATCCTAGAGGAGCTGTCTCCATTATTG  
TGAAATTATATCGTACTTTCAAGGACAATAAGTATGTATACATGCTTCTGGAGGCCTGCTTAGGTGGGA  
GCTCTGGAGTATATTAAGGGACAGAGGCAGCTTTGATGAACCCACCTCCAAATTCGCGTTGCTTGTGTG  
ACAGAAGCATTGATTACCTGCATCGACTAGGTATTATCTACAGAGACTTGAAACCAGAAAACTTAATTC  
TAGATGCTGAGGGTTACCTAAATTGGTTGACTTTGGATTTGCGAAGAAAATAGGGTCTGGACAGAAAAC  
ATGGACATTCTGTGGGACTCCAGAATATGTAGCTCCTGAAGTCAATCTCAACAAGGGACATGACTTCAGT  
GTGGATTTCTGGTCACTGGGAATCTAGTGTATGAGCTCCTAACGGGCAACCCACCCTTTCTGGGGTTG  
ACCAAATGATGACCTACAATTTGATTCTCAAAGGAATTGAAAAATGGATTTTCCAGGAAGATAACAGC  
ACGACCTGAGGATTTGATTCGGAGGCTTTGCAGGCAAAATCCAACAGAAAGGCTGGGAAATCTGAAGAAT  
GGAATAAATGACATTAAGAAACACAGGTGGTTAAATGGTTTTAATGGGAGGGACTGAAAGCACGGAGCC  
TTCCATCACCTTTGCAAAGAGAGCTCAAGGGACCCATAGATCACAGCTACTTTGACAAATATCCTCCTGA  
AAAGGGAATGCCTCCAGATGAGCTATCAGGCTGGGATAAAGACTTC

**ACGGT**ACGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC237586 representing NM\_001282480  
Red=Cloning site Green=Tags(s)

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

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

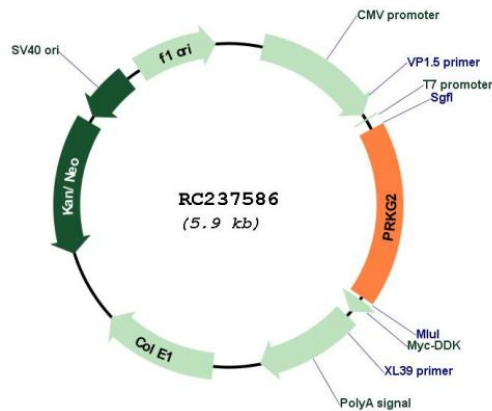
**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001282480

**ORF Size:** 1026 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001282480.1</a> , <a href="#">NP_001269409.1</a>
<b>RefSeq Size:</b>	3897 bp
<b>RefSeq ORF:</b>	1029 bp
<b>Locus ID:</b>	5593
<b>UniProt ID:</b>	<a href="#">Q13237</a>
<b>Cytogenetics:</b>	4q21.21
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	Gap junction, Long-term depression, Olfactory transduction
<b>MW:</b>	39.9 kDa
<b>Gene Summary:</b>	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]