

## Product datasheet for **SC335481**

### CGK2 (PRKG2) (NM\_001282481) Human Untagged Clone

#### Product data:

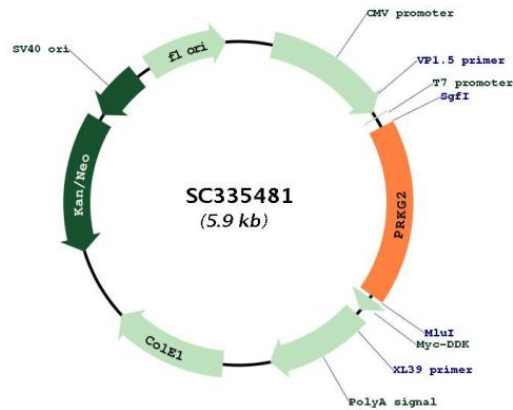
Product Type:	Expression Plasmids
Product Name:	CGK2 (PRKG2) (NM_001282481) Human Untagged Clone
Tag:	Tag Free
Symbol:	PRKG2
Synonyms:	cGK2; cGKII; PKG2; PRKGR2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC335481 representing NM_001282481. Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC GCGATCGCC
ATGTCTAACTGGAAGCTGTCCAAAGCACTCTCTGGAATGATTCAGCTGAAGGAGAAGGTGGCCAGA
TTTTCTCATCATCCCCATTCCAGAACCTTGAGATTATTGCAACACTGGGCGTTGGTGGTTCGGAAGA
GTTGAGCTTGTTAAAGTAAAAATGAGAATGTTGCTTTTGCTATGAAGTGTATAAGGAAGAAGCACATA
GTTGACACCAAGCAGCAGGAGCATGTCTACTCAGAGAAGAGGATCCTAGAGGAGCTGTGCTCTCCATTC
ATTGTGAAATTATATCGTACTTTCAAGGACAATAAGTATGTATACATGCTTCTGGAGGCCTGCTTAGGT
GGGAGCTCTGGAGTATATTAAGGGACAGAGGCAGCTTTGATGAACCCACCTCCAATTCGCGTTGCT
TGTGTGACAGAAGCATTGATTACCTGCATCGACTAGGTATTATCTACAGAGACTTGAAACCAGAAAAC
TTAATTCTAGATGCTGAGGGTTACCTTAAATTGGTTGACTTTGGATTTGCGAAGAAAATAGGGTCTGGA
CAGAAAACATGGACATTCTGTGGGACTCCAGAATATGTAGCTCCTGAAGTCATTCTCAACAAGGGACAT
GACTTCAGTGTGGATTTCTGGTCACTGGGAATTCTAGTGTATGAGCTCCTAACGGCAACCCACCCCTT
TCTGGGTTGACCAATGATGACCTACAATTTGATTCTCAAAGGAATTGAAAAATGGATTTCCAGG
AAGATAACACGACGACCTGAGGATTTGATTCGGAGGCTTGCAGGCAAAATCCAACAGAAAGGCTGGGA
AATCTGAAGAATGGAATAAATGACATTAAGAAACACAGGTGGTTAAATGGTTTTAATTGGGAGGACTG
AAAGCAGGAGCCTTCCATCACCTTTGCCAAAGAGAGCTCAAGGGACCCATAGATCACAGCTACTTTGAC
AAATATCCTCCTGAAAAGGGAATGCCTCCAGATGAGCTATCAGGCTGGGATAAAGACTTCTGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

Restriction Sites: Sgfl-Mlul



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**Plasmid Map:**


**ACCN:** NM\_001282481

**Insert Size:** 1029 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**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\\_001282481.1](#)

**RefSeq Size:** 3771 bp

**RefSeq ORF:** 1029 bp

**Locus ID:** 5593

**UniProt ID:** [Q13237](#)

**Cytogenetics:** 4q21.21

<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	Gap junction, Long-term depression, Olfactory transduction
<b>MW:</b>	39.4 kDa
<b>Gene Summary:</b>	<p>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]</p> <p>Transcript Variant: This variant (3) represents the use of an alternate promoter, and has multiple differences compared to variant 1. These differences result in a distinct 5' UTR and cause translation initiation at a downstream start codon compared to variant 1. The resulting isoform (b) has a shorter N-terminus compared to isoform a. Variants 2 and 3 encode the same protein.</p>