

Product datasheet for **RG237586**

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:	TurboGFP
Symbol:	PRKG2
Synonyms:	cGK2; cGKII; PKG2; PRKGR2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG237586 representing NM_001282480. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC GCGATCGCC
ATGTCTAACTGGAAGCTGTCCAAGCACTCTCTCTGGAATGATTCAGCTGAAGGAGAAGGTGGCCAGA
TTTTCTCATCATCCCCATTCCAGAACCTTGAGATTATTGCAACACTGGGCGTTGGTGGTTTCGGAAGA
GTTGAGCTTGTTAAAGTAAAAATGAGAATGTTGCTTTTGCTATGAAGTGTATAAGGAAGAAGCACATA
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AAAGCACGGAGCCTTCCATCACCTTTGCAAAGAGAGCTCAAGGGACCCATAGATCACAGCTACTTTGAC
AAATATCCTCCTGAAAAGGGAATGCCTCCAGATGAGCTATCAGGCTGGGATAAAGACTTC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
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Protein Sequence: >Peptide sequence encoded by RG237586
 Blue=ORF Red=Cloning site Green=Tag(s)

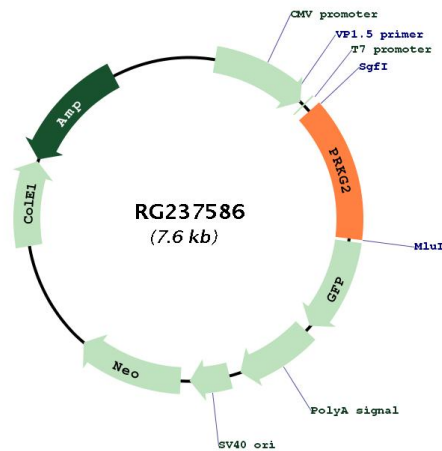
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 VDTKQEHVYSEKRILEELCSPIVKL YRTFKDNKYVYMLLEACLGGELWSILRDRGSFDEPTSKFCVA
 CVTEAFDYLRHLGIIYRDLKPENILDAEGLKLVDFGFAKKIGSQKWTWFCGTPEYVAPEVILNKGH
 DFSVDFWLSLILVYELLTGNPPFSGVDQMMTYNLILKGIKMDFFPRKITRRPEDLIRRLCRQNPTELRG
 NLKNGINDIKKRWLNNGFNWEGLKARSLPSPLQRELKGPIDHSYFDKYPPEKGMPPDEL SGWDKDF
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV
 MGYGFYHFGTYPSTYENPFLHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001282480

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).
RefSeq:	NM_001282480.1 , NP_001269409.1
RefSeq Size:	3897 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]