OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RG207946

PRKACG (NM_002732) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PRKACG (NM_002732) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PRKACG
Synonyms:	BDPLT19; KAPG; PKACg
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG207946 representing NM_002732
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGCAACGCCCCCGCCAAGAAGGACACCGAGCAGGAGGAGAGCGTGAACGAGTTCCTAGCCAAAGCCA
GAGGAGATTTCCTCTACAGATGGGGAAACCCCGCTCAAAACACCGCCAGCTCGGATCAGTTCGAACGGCT
CAGGACGCTGGGCATGGGCTCCTTCGGGCGGGTGATGCTGGTGAGGCACCAGGAGACCGGCGGCCACTAC
GCCATGAAGATCCTCAACAAGCAGAAGGTGGTGAAGATGAAGCAGGTCGAGCACATACTGAACGAGAAGC
GCATCCTGCAGGCGATCGACTTTCCGTTCCTCGTCAAGCTCCAGTTCTCCTTTAAGGACAACTCCTACCT
GTACCTGGTGATGGAGTACGTGCCGGGTGGGGAGATGTTCTCCCGCCTACAGCGCGTCGGAAGGTTTAGC
GAGCCCCATGCCTGTTTCTATGCCGCCCAGGTCGTCCTGGCCGTCCAGTACCTACACTCGCTCGACCTCA
TCCACCGCGACCTGAAGCCCGAGAATCTCCTCATCGACCAGCAGGGCTACCTGCAGGTGACGGACTTCGG
TTTCGCCAAGCGCGTGAAGGGCCGCACTTGGACCTTGTGCGGGACCCCAGAGTACCTGGCCCCCGAGATC
ATCCTGAGCAAAGGCTACAACAAGGCCGTGGACTGGTGGGCCCTAGGGGTGCTCATCTATGAGATGGCCG
TGGGCTTCCCACCCTTCTACGCCGACCAGCCCATCCAGATCTACGAGAAGATCGTCTCTGGGAGGGTGCG
GTTTCCCTCCAAACTCAGCTCTGACCTCAAGCATCTGCTGCGGAGCCTGCTGCAGGTGGACCTCACCAAG
CGCTTCGGAAACCTCAGGAACGGGGTTGGCGACATCAAGAACCACAAGTGGTTCGCCACAACCAGCTGGA
TCGCCATCTATGAGAAGAAGGTGGAAGCTCCCTTCATCCCGAAGTACACAGGCCCTGGGGATGCCAGTAA
CTTTGACGACTACGAGGAGGAAGAGCTCCGGATCTCCATCAATGAGAAGTGTCCCAAGGAGTTTTCTGAG
TTT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

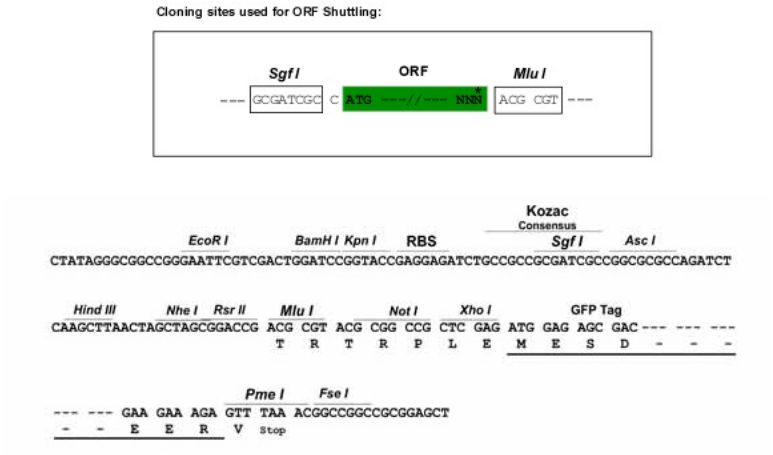
>RG207946 representing NM_002732
Red=Cloning site Green=Tags(s)

MGNAPAKKDTEQEESVNEFLAKARGDFLYRWGNPAQNTASSDQFERLRTLGMGSFGRVMLVRHQETGGHY
AMKILNKQKVVKMKQVEHILNEKRILQAIDFPFLVKLQFSFKDNSYLYLVMEYVPGGEMFSRLQRVGRFS
EPHACFYAAQVVLAVQYLHSLDLIHRDLKPENLLIDQQGYLQVTDFGFAKRVKGRTWTLCGTPEYLAPEI
ILSKGYNKAVDWWALGVLIYEMAVGFPPFYADQPIQIYEKIVSGRVRFPSKLSSDLKHLLRSLLQVDLTK
RFGNLRNGVGDIKNHKWFATTSWIAIYEKKVEAPFIPKYTGPGDASNFDDYEEEELRISINEKCPKEFSE
F

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002732

ORF Size: 1053 bp

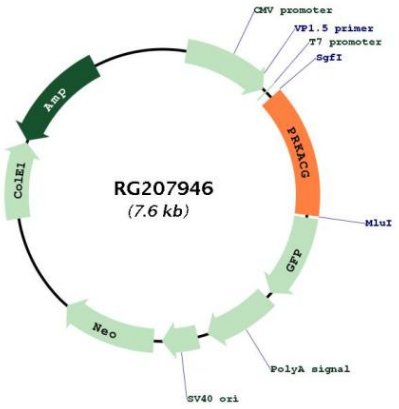
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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_002732.2, NP_002723.2
RefSeq Size:	1560 bp
RefSeq ORF:	1056 bp
Locus ID:	5568
UniProt ID:	P22612
Cytogenetics:	9q21.11
Domains:	pkinase, S_TK_X, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Apoptosis, Calcium signaling pathway, Chemokine signaling pathway, Dilated cardiomyopathy, Gap junction, GnRH signaling pathway, Hedgehog signaling pathway, Insulin signaling pathway, Long-term potentiation, MAPK signaling pathway, Melanogenesis, Olfactory transduction, Oocyte meiosis, Prion diseases, Progesterone-mediated oocyte maturation, Taste transduction, Vascular smooth muscle contraction, Vibrio cholerae infection, Wnt signaling pathway
Gene Summary:	Cyclic AMP-dependent protein kinase (PKA) consists of two catalytic subunits and a regulatory subunit dimer. This gene encodes the gamma form of its catalytic subunit. The gene is intronless and is thought to be a retrotransposon derived from the gene for the alpha form of the PKA catalytic subunit. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG207946