

Product datasheet for **RC207946**

PRKACG (NM_002732) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | PRKACG (NM_002732) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | PRKACG |
| Synonyms: | BDPLT19; KAPG; PKACg |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| ORF Nucleotide Sequence: | >RC207946 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCAACGCCCCGCCAAGAAGGACACCGAGCAGGAGGAGAGCGTGAACGAGTTCCTAGCCAAAGCCA
GAGGAGATTTCTCTACAGATGGGAAACCCCGCTCAAAACACCGCCAGCTCGGATCAGTTCGAACGGCT
CAGGACGCTGGGCATGGCTCCTTCGGCGGGTGATGCTGGTGAAGCACCAGGAGACCGGCCACTAC
GCCATGAAGATCCTCAACAAGCAGAAGGTGGTGAAGATGAAGCAGGTCGAGCACATACTGAACGAGAAGC
GCATCCTGCAGGCGATCGACTTTCGGTTCCTCGTCAAGTCCAGTTCCTTTAAGGACAACCTCCTACCT
GTACCTGGTGAAGTACGTGCCGGTGGGAGATGTTCTCCCGCTACAGCGCTCGGAAGGTTTAGC
GAGCCCATGCCTGTTTCTATGCCGCCAGGTCGTCCTGGCCGTCCAGTACCTACACTCGCTCGACCTCA
TCCACCGCAGCTGAAGCCCGAGAATCTCCTCATCGACCAGCAGGGCTACCTGCAGGTGACGGACTTCGG
TTTCGCCAAGCGCGTGAAGGGCCGCACTTGGACCTTGTCGGGACCCAGAGTACCTGGCCCCGAGATC
ATCCTGAGCAAAGGCTACAACAAGGCCGTGGACTGGTGGGCCCTAGGGGTGCTCATCTATGAGATGGCCG
TGGGCTTCCCACCTTCTACGCCAGCAGCCATCCAGATCTACGAGAAGATCGTCTCTGGGAGGGTGCC
GTTTCCCTCAAACCTCAGCTCTGACCTCAAGCATCTGTCGCGAGCCTGCTGCAGGTGACCTCACCAAG
CGCTTCGGAACCTCAGGAACGGGTTGGCGACATCAAGAACCACAAGTGGTTCGCCACAACCAAGCTGGA
TCGCCATCTATGAGAAGAAGGTGGAAGCTCCCTTCATCCCGAAGTACACAGGCCCTGGGGATGCCAGTAA
CTTTGACGACTACGAGGAGGAAGAGCTCCGGATCTCCATCAATGAGAAGTGTCCCAAGGAGTTTTCTGAG
TTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC207946 protein sequence
Red=Cloning site Green=Tags(s)

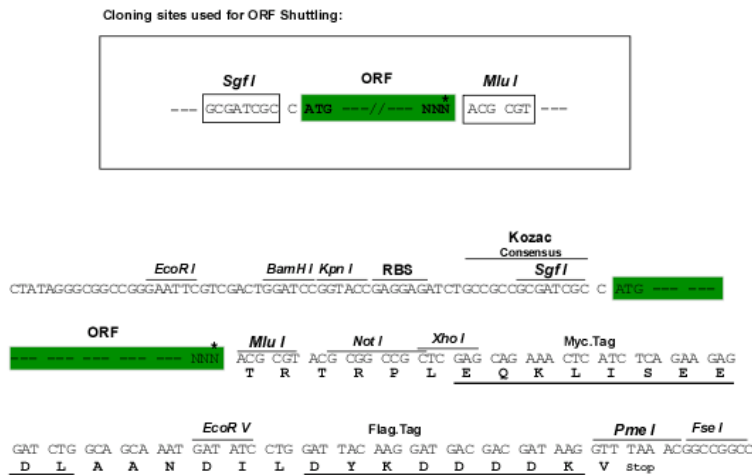
MGNAPAKKDTEQEEVNEFLAKARGDFLYRWGNPAQNTASSDQFERLRTLGMGSFGRVMLVRHQETGGHY
 AMKILNKQKVVVKMKQVEHILNEKRILQAIDFPFLVKLQFSFKDNSYLYL VMEYVPGGEMFSRLQRVGRFS
 EPHACFYAAQVVLAVQYLHSLDLIHRDLKPENLLIDQQGYLQVTDGFAKRVKGRWTWLCGTPEYLAPEI
 ILSKGYNKAVDWWALGVL IYEMAVGFPPFYADQPIQIYEKIVSGRVRFPSKLSDDLKHLRLSLLQVDLTK
 RFGNLRNGVVDIKNHKWFATTSWIAIYEKKVEAPFIPKYTGPGDASNFDDEEEELRISINEKCPKEFSE
 F

TRTRPLEQKLISEEDLAANDILDYKDDDDKVV

Chromatograms: https://cdn.origene.com/chromatograms/mk6022_a07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002732

ORF Size: 1053 bp

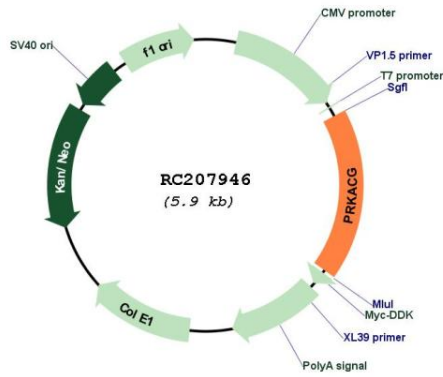
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

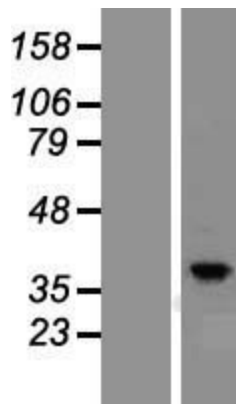
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

| | |
|-------------------------------|---|
| Reconstitution Method: | <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_002732.4 |
| RefSeq Size: | 1614 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 |
| MW: | 40.5 kDa |
| 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 RC207946



Western blot validation of overexpression lysate (Cat# [LY419142]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207946 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).