

Product datasheet for **RG228863**

PRKAR1B (NM_001164761) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: PRKAR1B (NM_001164761) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: PRKAR1B
Synonyms: PRKAR1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG228863 representing NM_001164761
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGGATCGCC

ATGGCCTCCCCGCCGCTGCCCTCGGAGGAGGACGAGAGCCTGAAGGGCTGTGAGCTGTACGTGCAGC
 TGCACGGGATCCAGCAGGTCTCAAAGACTGTATCGTCCACCTCTGCATCTCCAAGCCCCAACGCCCCAT
 GAAGTTCCTCCGGGAGCACTTCGAGAAGCTGGAGAAGGAAGAAAACAGGCAGATTTGGCGCGGCAAAAG
 TCAAACACACAGTCGGACTCCCATGATGAGGAGGTGTCGCCACCCCCCGAACCCCTGTGGTGAAGGCC
 GCCGCCGCGGAGGAGGCGTGAGTGCCGAGGTGTACACCGAGGAGGACGCCGTGTCCTACGTCAGGAAGGT
 GATTCCTCAAGGACTACAAAACCATGACTGCGCTGGCCAAGGCCATCTCCAAGAAGCTGCTCTTCGCTCAC
 CTGGATGACAACGAGAGGAGTGACATATTCGATGCCATGTTCCCTGTCACTCACATCGCTGGGGAGACTG
 TTATACAGCAAGGGAATGAAGGAGACAACCTTCTATGTCGTTGATCAAGGGGAAGTGGATGTGTACGTGAA
 CGGAGAGTGGGTGACCAACATCAGCGAGGGAGGCAGCTTCGGGGAGCTGGCGCTCATCTACGGCACCCCC
 AGGGCTGCGACCGTGAAGCCAAGACGGACCTCAAGCTCTGGGGGATCGACCGGGACAGCTACCGGCCGA
 TCCTTATGGGCAGCACGCTGAGGAAACGCAAGATGTACGAGGAGTTCCTCAGCAAGGTCTCCATCTAGA
 GTCCCTGGAGAAGTGGGAGCGTCTGACCGTGGCGGATGCGCTGGAGCCCCTCCAGTTTGAAGATGGAGAG
 AAAATCGTGGTCCAGGGAGAGCCTGGGGACGACTTTTACATCATCACGGAGGGCACCGCGTCCGCTGCTGC
 AGCGCCGTCCTCCCAATGAGGAGTACGTGGAGGTGGGGCGCCTGGGACCCCTCTGACTACTTCGGGGAGAT
 TGCACTGCTGCTGAACCGCCCCGGCGGCCACTGTCGTGGCCCCGGGGCCCTCAAGTGTGTGAAGCTG
 GACCGGCCCGCTTCGAGCGTGTGCTGGGGCCCTGCTCTGAGATCCTCAAGAGGAACATTACAGGTTACA
 ACAGCTTCATCTCCCTACCGTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG228863 representing NM_001164761
 Red=Cloning site Green=Tags(s)

MASPPACPSEEDSLKGCELYVQLHGIQQVLKDCIVHLCISKPERPMKFLREHFEEKLEENRQILARQK
 SNSQSDSHDEEVSPTPPNPVVKARRRRGGVSAEVYTEEDAVSYVRKVIKDYKMTALAKAISKNVLF
 LDDNERSDIFDAMFPVTHIAGETVIQQNEGDNFYVVDQGEVDVYVNGEWTNISEGGSFGELAL
 IYGTP RAATVKAKTDLKLGIDRDSYRRILMGSTLRKRKMYEEFLSKVSILESLEKWERLTVADALEPVQFEDGE
 KIVVQGEPGDDFYIITEGTASVLRRRSPNEEYVEVGRGLGPSDYFGEIALLLNRPRAATVVARGLKCVKL
 DRPRFERVLGPCSEILKRNIQRYNSFISLTV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001164761

ORF Size: 1143 bp

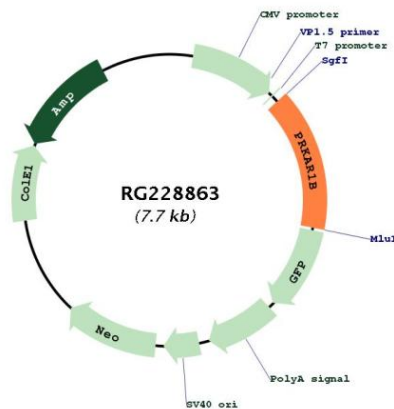
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_001164761.1](#), [NP_001158233.1](#)
- RefSeq Size:** 2554 bp
- RefSeq ORF:** 1146 bp
- Locus ID:** 5575
- UniProt ID:** [P31321](#)
- Cytogenetics:** 7p22.3
- Protein Families:** Druggable Genome
- Protein Pathways:** Apoptosis, Insulin signaling pathway
- Gene Summary:** The protein encoded by this gene is a regulatory subunit of cyclic AMP-dependent protein kinase A (PKA), which is involved in the signaling pathway of the second messenger cAMP. Two regulatory and two catalytic subunits form the PKA holoenzyme, disbands after cAMP binding. The holoenzyme is involved in many cellular events, including ion transport, metabolism, and transcription. Several transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Aug 2015]

Product images:



Circular map for RG228863