

Product datasheet for **MG217190**

Prkacb (NM_001164200) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Prkacb (NM_001164200) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Prkacb
Synonyms:	CbPKA; Pkacb
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG217190 representing NM_001164200 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAGCTCACAAGAAGTGTCCAGTGGCCAGCACAGTGGCACGCCACCGCCCTCCAGAAGCTGGAGG
GGTTCGCTAGCCGCCTGTTTCACAGGCACTCCAGAGCCACCGCACAAAGAGCACAGGGCAGCTCTGGAAGA
TGACGGCCTTCGGGCCTCTGAGCACACTGCCTCATGGGACAAATCAATGAAAGAGTTTCTAGCCAAAGCC
AAAGAAGACTTTCTGAGGAAATGGGAGAACCCTCCCCGAGTAATGCTGGCTTGAGGATTTTGAGAGGA
AGAAAACCCTCGGACGGGTTCCCTTTGGAAGAGTCATGTTGGTGAAGCATAAAGCCACTGAGCAGTACTA
CGCATGAAGATCTTAGACAAGCAGAAGTTGTTAAGCTGAAGCAAATAGAGCACACTCTGAATGAGAAG
AGAATCCTGCAGGCCGTGGAGTTCCCGTTCCTTGTGCGGCTGGAGTACTCTTTAAGGATAATTCTAATT
TATACATGGTTATGGAATACGTCCTCGGGGAGAGATGTTCTCACATCTGAGAAGAATTGGAAGGTTTCAG
TGAGCCCCACGCCGTTTCTATGCAGCCAGATTGTGCTAACATTTGAGTACCTTCATCCCTCGACCTC
ATCTACAGAGATCTCAAGCCGAAAACCTCTTAATTGACCACCAGGGTTACATCCAGGTCACAGATTTTCG
GGTTCGCCAAAAGAGTCAAGGGCAGGACATGGACATTGTGTGGCACCCACAGTACCTGGCCCCGGAGAT
CATCCTCAGCAAGGGTTACAATAAGCGGTGGACTGGTGGCACTGGGCGTGTGATCTATGAGATGGCT
GCTGGTACCTCCATTCTTTGCTGACCAGCCAATTCAGATCTATGAGAAGATTGTCTGGAAAGGTTCC
GGTTCATCACACTTCAGCTCCGATCTCAAGGACCTTCTGCGGAACCTGCTGCAGGTGGATCTGACAAA
GCGATTCCGGAACCTGAAGAACGCGTGTGAGTACATAAAGACCCACAAGTGGTTTCCACAAGTACTGGG
ATTGCTATTTATCAGAGAAAGGTTGAGGCTCCATTATACCAAAGTTCAGAGGCTCTGGCGATACCAGCA
ACTTCGATGACTATGAAGAAGAAGAAATCCGTGTGTCTATAACAGAAAAATGTGGAAGGAATTTGTGA
ATTT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG217190 representing NM_001164200
Red=Cloning site Green=Tags(s)

MAAHKELSSGQHSPTALQKLEGFASRLFHRHSRGTAEHRAALEDGLRASEHTASWDKSMKEFLAKA
 KEDFLRKWENPPPSNAGLEDFERKKTLLGTGSFGRVMLVKHKATEQYYAMKILDKQKVVKLKQIEHTLNEK
 RILQAVEFPFLVRLEYSFKDNSNLYMVMYVPGGEMFSLHRRIGRFSEPHARFYAAQIVLTFEYLHSLDL
 IYRDLKPENLLIDHQGYIQVDFGFAKRVKGRWTLCGTPEYLAPEIILSKGYNKAVDWWALGVL IYEMA
 AGYPPFFADQPIQIYEKIVSGKVRFP SHFSSDLKDLLRNLLQVDLTKRFGNLKNGVSDIKTHKWFATTDW
 IAIYQRKVEAPFIPKFRGSGDTSNFDDYEEEEIRVSITEKCGKEFCF

TRTRPLE - GFP Tag - V

Chromatograms: https://cdn.origene.com/chromatograms/ja1340_h01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001164200

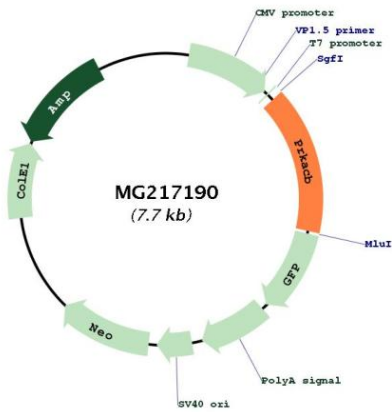
ORF Size: 1194 bp

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:	<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_001164200.1 , NP_001157672.1
RefSeq Size:	4302 bp
RefSeq ORF:	1197 bp
Locus ID:	18749
UniProt ID:	P68181
Cytogenetics:	3 H2
Gene Summary:	Mediates cAMP-dependent signaling triggered by receptor binding to GPCRs. PKA activation regulates diverse cellular processes such as cell proliferation, the cell cycle, differentiation and regulation of microtubule dynamics, chromatin condensation and decondensation, nuclear envelope disassembly and reassembly, as well as regulation of intracellular transport mechanisms and ion flux (PubMed:9368018). Regulates the abundance of compartmentalized pools of its regulatory subunits through phosphorylation of PJA2 which binds and ubiquitinates these subunits, leading to their subsequent proteolysis. Phosphorylates GPKOW which regulates its ability to bind RNA (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG217190