

Product datasheet for **MG219172**

Prkacb (NM_001164199) Mouse Tagged ORF Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | Prkacb (NM_001164199) 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: | >MG219172 representing NM_001164199 Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCTTGTGAAAGAGTTTCTAGCCAAAGCCAAAGAAGACTTTCTGAGGAAATGGGAGAACCTCCCC
CGAGTAATGCTGGGCTTGAGGATTTTGAGAGGAAGAAAACCTCGGGACGGGTTCTTTGGAAGAGTCAT
GTTGGTGAAGCATAAAGCCACTGAGCAGTACTACGCCATGAAGATCTTAGACAAGCAGAAGGTTGTTAAG
CTGAAGCAAATAGAGCACACTCTGAATGAGAAGAGAATCCTGCAGGCCGTGGAGTCCCGTTCCTTGTC
GGCTGGAGTACTCTTTAAGGATAATTCTAATTTATACATGGTTATGGAATACGTCCTGGGGAGAGAT
GTTCTCACATCTGAGAAGAATTGGAAGGTTCAAGTACGCCCCACGCCGTTTCTATGCAGCCAGATTGTG
CTAACATTTGAGTACCTTCATCCCTCGACCTCATCTACAGAGATCTCAAGCCGGAAAACCTCTTAATTG
ACCACCAGGGTTACATCCAGGTCACAGATTTCCGGTTCGCCAAAAGAGTCAAGGGCAGGACATGGACATT
GTGTGGCACCCAGAGTACCTGGCCCGGAGATCATCCTCAGCAAGGTTACAATAAGGCGGTGGACTGG
TGGGCACTGGGCGTGTGATCTATGAGATGGCTGCTGGCTACCCTCCATTCTTTGCTGACCAGCCAATTC
AGATCTATGAGAAGATTGCTCTGGAAGGTCCGGTCCCATCACACTTCAGCTCCGATCTCAAGGACCT
TCTGCGAACCTGCTGCAGGTGGATCTGACAAAGCGATTTCGGAAACCTGAAGAACGGCGTGAGTGACATA
AAGACCCACAAGTGTTTGCACAACCTGACTGGATTGCTATTTATCAGAGAAAGGTTGAGGCTCCATTCA
TACCAAAGTTTCAAGGCTCTGGCGATACCAGCAACTTCGATGACTATGAAGAAGAAGAAATCCGTGTGTC
TATAACAGAAAAATGTGGAAGGAATTTGTGAATTT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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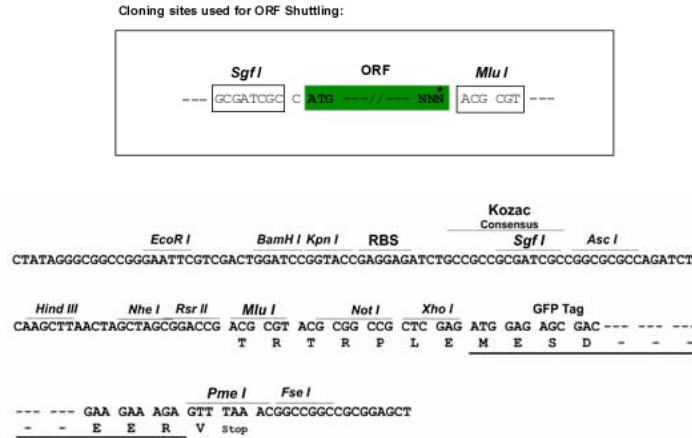
Protein Sequence: >MG219172 representing NM_001164199
 Red=Cloning site Green=Tags(s)

MGLLKEFLAKAKEDFLRKWENPPPSNAGLEDFERKKTLTGTSFGRVMLVKHKATEQYYAMKILDKQKVVK
 LKQIEHTLNEKRILQAVEFPFLVRLSEYFKDNSNLYMMEYVPGGEMFSLRRIGRFSEPHARFYAAQIV
 LTFEYLHSLDLIYRDLKPENLLIDHQGYIQVTDGFAKRVKGRWTLCGTPEYLAPEIILSKGYNKAVDW
 WALGVL IYEMAAGYPPFFADQPIQIYEKIVSGKVRFP SHFSSDLKDLLRNLLQVDLTKRFGNLKNGVSDI
 KTHKWFATTDWIAIYQRKVEAPFIPKFRSGDTSNFDDYEEEEIRVSITEKCGKEFCF

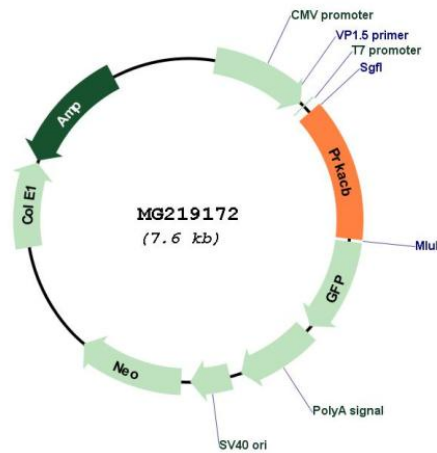
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001164199

ORF Size: 1017 bp

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| 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_001164199.1 , NP_001157671.1 |
| RefSeq Size: | 4210 bp |
| RefSeq ORF: | 1020 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] |