

## Product datasheet for MC209173

### Prkacb (NM\_001164199) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Prkacb (NM\_001164199) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Prkacb  
**Synonyms:** CbPKA; Pkacb  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC209173 representing NM\_001164199  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGGCTTGTGAAAGAGTTTCTAGCCAAAGCCAAAGAAGACTTTCTGAGGAAATGGGAGAACCCCTCCC  
 CGAGTAATGCTGGCTTGAGGATTTTGTAGAGGAAGAAAACCTCGGGACGGGTTCCCTTTGGAAGAGTCAT  
 GTTGGTGAAGCATAAAGCCACTGAGCAGTACTACGCCATGAAGATCTTAGACAAGCAGAAGTTGTTAAG  
 CTGAAGCAAATAGAGCAGTCTGAATGAGAAGAGAATCCTGCAGGCCGTGGAGTTCCTTCTTGTGC  
 GGCTGGAGTACTCTTTAAGGATAAATTCTAATTTATACATGGTTATGGAATACGTCCTGGGGGAGAGAT  
 GTTCTCACATCTGAGAAGAATTGGAAGTTTCAGTGAGCCCCACGCCGTTTCTATGCAGCCAGATTGTG  
 CTAACATTTGAGTACCTTCATCCCTCGACCTCATCTACAGAGATCTCAAGCCGAAAACCTCTTAATTG  
 ACCACCAGGTTACATCCAGGTCACAGATTTCCGGTTCGCCAAAAGAGTCAAGGGCAGGACATGGACATT  
 GTGTGGCACCCAGAGTACCTGGCCCCGAGATCATCCTCAGCAAGGTTACAATAAGGCGGTGGACTGG  
 TGGGCACTGGGCGTGTGATCTATGAGATGGCTGGTACCCTCCATTCTTTGCTGACCAGCCAATTC  
 AGATCTATGAGAAGATTGTCTGGAAGGTCGGTTCCTCACACTTCAGTCCGATCTCAAGGACCT  
 TCTGCGAACCTGCTGCAGGTGGATCTGACAAAGCGATTTCGGAACTGAAGAACGGCGTGAGTGACATA  
 AAGACCCACAAGTGGTTTGCACAACTGACTGGATTGCTATTTATCAGAGAAAGTTGAGGCTCCATTCA  
 TACCAAAGTTCAGAGGCTCTGGCGATACCAGCAACTTCGATGACTATGAAGAAGAAGAAATCCGTGTGTC  
 TATAACAGAAAAATGTGGAAAGGAATTTGTGAATTT**AG**

**ACGGT**ACGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_001164199



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<b>Insert Size:</b>	1020 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u><a href="#">NM_001164199.1</a></u> , <u><a href="#">NP_001157671.1</a></u>
<b>RefSeq Size:</b>	4210 bp
<b>RefSeq ORF:</b>	1020 bp
<b>Locus ID:</b>	18749
<b>UniProt ID:</b>	<u><a href="#">P68181</a></u>
<b>Cytogenetics:</b>	3 H2
<b>Gene Summary:</b>	<p>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]</p> <p>Transcript Variant: This variant (3) uses an alternative exon at the 5' end compared to variant 1. The resulting isoform (3) has a distinct and shorter N-terminus, as compared to isoform 1.</p>