

## Product datasheet for **RN215333**

### Prkacb (NM\_001077645) Rat Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Prkacb (NM\_001077645) Rat Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Prkacb  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >RN215333 representing NM\_001077645  
Red=Cloning site Blue=ORF Orange=Stop codon

CTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCGC  
GCC

ATGGGGAACACGGCGATCGCCAAGAAAGGCAGCGAAGTGGAGAGCGTGAAAGAATTCCTAGCCAAGGCCA  
AGAAGACTTTCTGAGGAAATGGGAGAACCCTCCCCGAGTAATGCTGGGCTTGAGGATTTTGAAGGAA  
AAAAACCCTTGGACGGGTTCCCTCGGAAGAGTCATGCTGGTAAAGCATAAAGCCACTGAGCAGTACTAC  
GCCATGAAGATCTTAGACAAGCAGAAGGTCGTTAAGCTAAAGCAAATAGAGCACACTCTGAATGAGAAGA  
GAATCCTGCAGGCAGTGGAGTCCCGTTCCTTGTTCGGCTGGAGTATTCTTTAAGGATAATTCTAATTT  
ATACATGGTTATGGAATACGTTCTGGGGGAAATGTTTTACATCTAAGAAGAATTGGAAGGTTCACT  
GAACCCCATGCTCGTTTCTATGCAGCTCAGATCGTCTAACATTTGAGTACCTCCATTCCCTCGACCTCA  
TCTACAGAGATCTCAAGCCGAAAACCTCTTAATTGACCACCAGGTTACATCCAGGTCACAGATTTTGG  
GTTCCGCAAGAGAGTCAAGGGCAGGACTTGGACATTGTGTGCCACCCAGAGTACCTGGCCCCAGAGATC  
ATCCTCAGCAAGGTTACAATAAGGCAGTGGACTGGTGGCATTGGTGTACTGATCTACGAGATGGCTG  
CTGGCTACCCCGTTCCTTGTGACCAGCCAATTCAGATTTATGAGAAGATTGTTCCGGAAAGGTTCCG  
CTTCCCGTCGCACTTCAGTTCGATCTCAAGGACCTTCTGCGGAATCTGCTGCAGGTGGATCTGACAAAG  
CGGTTTGGGAACCTGAAGAATGGCGTGAGTGACATCAAGACCCACAAGTGGTTTGTACGACCGACTGGA  
TCGCGATTTACCAGAGAAAGGTTGAGGCTCATTACATACAAAATTCAGAGGCTCTGGCGATACCAGCAA  
CTTCGATGACTATGAAGAAGAAGAAATCCGAGTGTCTATAACAGAAAAATGTGGAAGGAGTTTTGTGAA  
TTTAG

ACGGCTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** AscI-MluI  
**ACCN:** NM\_001077645  
**Insert Size:** 1056 bp



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<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_001077645.1</a></u> , <u><a href="#">NP_001071113.1</a></u>
<b>RefSeq Size:</b>	1122 bp
<b>RefSeq ORF:</b>	1056 bp
<b>Locus ID:</b>	293508
<b>UniProt ID:</b>	<u><a href="#">P68182</a></u>
<b>Cytogenetics:</b>	2q44
<b>Gene Summary:</b>	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. 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.[UniProtKB/Swiss-Prot Function]