

Product datasheet for **MC209174**

Prkacb (NM_001164198) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Prkacb (NM_001164198) 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: >MC209174 representing NM_001164198
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGAATGTGAAAGAGTTTCTAGCCAAAGCCAAAGAAGACTTTCTGAGGAAATGGGAGAACCCTCCCCGA
GTAATGCTGGGCTTGAGGATTTTGAGAGGAAGAAAACCCTCGGGACGGGTTCTTTGGAAGAGTCATGTT
GGTGAAGCATAAAGCCACTGAGCAGTACTACGCCATGAAGATCTTAGACAAGCAGAAGGTTGTTAAGCTG
AAGCAAATAGAGCACACTCTGAATGAGAAGAGAATCCTGCAGGCCGTGGAGTTCCCGTTCCTTGTGCGGC
TGGAGTACTCTTTAAGGATAATTCTAATTTATACATGGTTATGGAATACGTCCCTGGGGAGAGATGTT
CTCACATCTGAGAAGAATTGGAAGGTTCACTGAGCCCCACGCCGTTTCTATGCAGCCCAGATTGTGCTA
ACATTTGAGTACCTTCATTCCTCGACCTCATCTACAGAGATCTCAAGCCGAAAACCTCTTAATTGACC
ACCAGGGTTACATCCAGGTCACAGATTTTCGGGTCGCCAAAAGAGTCAAGGGCAGGACATGGACATTGTG
TGGACCCCAGAGTACCTGGCCCCGAGATCATCCTCAGCAAGGGTTACAATAAGGCGGTGGACTGGTGG
GCACTGGGCGTGCTGATCTATGAGATGGCTGCTGGCTACCCTCCATTCTTTGCTGACCAGCAATTGAG
TCTATGAGAAGATTGCTCTGGAAGGTTCCGGTCCCATCACACTTCAGCTCCGATCTCAAGGACCTTCT
CGGAACTGCTGCAGGTGGATCTGACAAAGCGATTTCGGGAACCTGAAGAACGGCGTGAGTGACATAAAG
ACCCACAAGTGGTTTGCACAAGTACTGGATTGCTATTTATCAGAGAAAAGGTTGAGGCTCCATTATAC
CAAAGTTCAGAGGCTCTGGCGTACCAGCAACTTCGATGACTATGAAGAAGAAGAAATCCGTGTGCTAT
AACAGAAAAATGTGGAAGGAATTTTGTGAATTTAG

ACGGTACGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_001164198



Insert Size:	1017 bp
OTI Disclaimer:	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).
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:	<u>NM_001164198.1</u> , <u>NP_001157670.1</u>
RefSeq Size:	4337 bp
RefSeq ORF:	1017 bp
Locus ID:	18749
UniProt ID:	<u>P68181</u>
Cytogenetics:	3 H2
Gene Summary:	<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 (2) uses an alternative exon at the 5' end compared to variant 1. The resulting isoform (2) has a distinct and shorter N-terminus, as compared to isoform 1.</p>