

## Product datasheet for MR205329

### Prkacb (NM\_011100) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Prkacb (NM_011100) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Prkacb
Synonyms:	CbPKA; Pkacb
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205329 representing NM_011100 Red=Cloning site Blue=ORF Green=Tags(s)

GACGTTGTATACGACTCCTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGGCGGCC

ATGGGGAACACTGCGATCGCCAAGAAAGGCAGCGAAGTGGAGAGCGTGAAAGAGTTTCTAGCCAAAGCCA  
AAGAAGACTTTCTGAGGAAATGGGAGAACCCTCCCCGAGTAATGCTGGGCTTGAGGATTTGAGAGGAA  
GAAAACCTCGGGACGGTTCCCTTGAAGAGTCATGTTGGTGAAGCATAAAGCCACTGAGCAGTACTAC  
GCCATGAAGATCTTAGACAAGCAGAAGTTGTTAAGCTGAAGCAAATAGAGCACACTCTGAATGAGAAGA  
GAATCCTGCAGGCCGTGGAGTCCCGTTCCTTGTGCGGCTGGAGTACTCTTTAAGGATAATTCTAATTT  
ATACATGGTTATGGAATACGTCCCTGGGGAGAGATGTTCTCACATCTGAGAAGAATTGGAAGGTTCAGT  
GAGCCCCACGCCGTTTCTATGCAGCCAGATTGTGCTAACATTTGAGTACCTTCATTCCCTCGACCTCA  
TCTACAGAGATCTCAAGCCGAAAACCTCTTAATTGACCACCAGGGTTACATCCAGGTCACAGATTTCCG  
GTTCCGAAAAGAGTCAAGGACAGGACATGGACATTGTGTGGCACCCAGAGTACCTGGCCCCGAGATC  
ATCCTCAGCAAGGGTTACAATAAGGCGGTGGACTGGTGGGCACTGGGCGTGTGATCTATGAGATGGCTG  
CTGGCTACCCTCCATTCTTTGCTGACCAGCCAATTCAGATCTATGAGAAGATTGTCTCTGGAAAGGTCGG  
GTTCCCATCACACTTCAGCTCCGATCTCAAGGACCTTCGCGAACCTGCTGCAGGTGGATCTGACAAAG  
CGATTCGGGAACCTGAAGAACGGCGTGAAGTACATAAAGACCCACAAGTGGTTTCCACAACACTGACTGGA  
TTGCTATTATCAGAGAAAGTTGAGGCTCCATTACATACCAAAGTTCAGAGGCTCTGGCGATACCGCAA  
CTTCGATGACTATGAAGAAGAAGAAATCCGTGTGTCTATAACAGAAAAATGTGGAAGGAATTTTGTGAA  
TTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR205329 representing NM\_011100  
Red=Cloning site Green=Tags(s)

MGNTAIAKKGSEVESVKEFLAKAKEDFLRKWENPPPSNAGLEDFERKKT LGTGSFGRVMLVKHKATEQYY  
 AMKILDKQKVVVKKQIEHTLNEKRILQAVEFPFLVRLEYSFKDNSLYMMEYVPGGEMFSLRRIGRFS  
 EPHARFYAAQIVLTFEYLHSLDLIYRDLKPENLLIDHQGYIQVTDGFAKRVKGRWTLCGTPEYLAPEI  
 ILSKGYNKAVDWWALGVLIYEMAAGYPPFFADQPIQIYEKIVSGKVRFP SHFSSDLKDLLRNLQVDLTK  
 RFGNLKNGVSDIKTHKWFATTDWIAIYQRKVEAPFIPKFRGSGDTSNFDDYEEEEIRVSI TEKCGKEFC  
 F

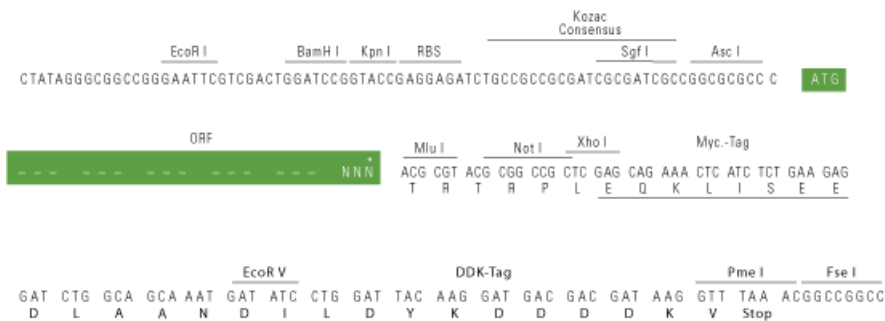
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

AscI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_011100

**ORF Size:** 1053 bp

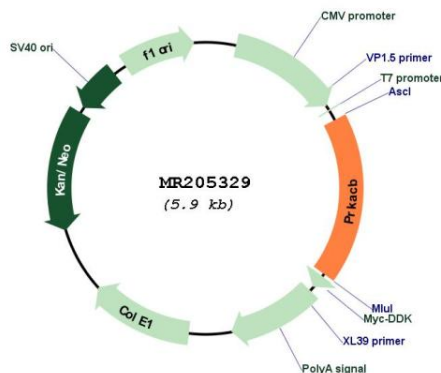
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of 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](mailto: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.

<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>NM_011100.4, NP_035230.1</u>
<b>RefSeq Size:</b>	4341 bp
<b>RefSeq ORF:</b>	1056 bp
<b>Locus ID:</b>	18749
<b>UniProt ID:</b>	<u>P68181</u>
<b>Cytogenetics:</b>	3 H2
<b>MW:</b>	41.2 kDa
<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 (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 MR205329