

## Product datasheet for SC327498

### PRKAR1B (NM\_001164761) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PRKAR1B (NM_001164761) Human Untagged Clone
Tag:	Tag Free
Symbol:	PRKAR1B
Synonyms:	PRKAR1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC327498 representing NM_001164761. Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTGTAGTAACCGTCAGAATTTTGTAAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG  
 GATCCGGTACCGAGGAGATCTGCCGCC**CGATCGCC**  
 ATGGCCTCCCGCCCGCTGCCCTCGGAGGAGGACGAGAGCCTGAAGGGCTGTGAGCTGTACGTGCAG  
 CTGCACGGGATCCAGCAGGTCTCAAAGACTGTATCGTCCACCTCTGCATCTCAAGCCCGAACGCCCC  
 ATGAAGTTCCTCCGGGAGCACTTCGAGAAGCTGGAGAAGGAAGAAACAGGCAGATTTTGGCGCGGCAA  
 AAGTCAAACCTCACAGTCGGAATCCCATGATGAGGAGGTGTGCGCCACCCCCGAACCTGTGGTGAAG  
 GCCCGCCCGCGGCGAGGAGGCGTGAGTGCCGAGGTGTACACCGAGGAGGACGCCGTGTCTACGTACAGG  
 AAGGTGATTCCCAAGGACTACAAAACCATGACTGCGCTGGCCAAGGCCATCTCCAAGAAGCTGCTCTTC  
 GCTCACCTGGATGACAACGAGAGGAGTGACATATTCGATGCCATGTTCCCTGTCACTCACATCGCTGGG  
 GAGACTGTTATACAGCAAGGGAATGAAGGAGACAATTCTATGTCGTTGATCAAGGGGAAGTGGATGTG  
 TACGTGAACGGAGAGTGGGTGACCAACATCAGCGAGGGAGGCAGCTTCGGGGAGCTGGCGCTCATCTAC  
 GGCACCCCGAGGGCTGCGACCGTGAAAGCCAAGACGGACCTCAAGCTCTGGGGGATCGACCGGGACAGC  
 TACCGGCGCATCCTTATGGGCAGCACGCTGAGGAAACGCAAGATGTACGAGGAGTTCTCAGCAAGGTC  
 TCCATCCTAGAGTCCCTGGAGAAGTGGGAGCGTCTGACCGTGGCGGATGCGCTGGAGCCCGTCCAGTTT  
 GAAGATGGAGAGAAAATTGTGGTCCAGGGAGAGCCTGGGGACGACTTTTACATCATCACGAGGGCACC  
 GCGTCCGTGCTGCAGCGCCGGTCCCCAATGAGGAGTACGTGGAGGTGGGGCGCCTGGGACCCTCTGAC  
 TACTTCGGGGAGATTGCACTGCTGCTGAACCGGCCCGGGCGGCCACTGTCGTGGCCCGGGGGCCCCCTC  
 AAGTGTGTGAAGCTGGACCGGCCCGCTTCGAGCGTGTGCTGGGGCCCTGCTCTGAGATCCTCAAGAGG  
 AACATTACGCGTTACAACAGCTTCATCTCCCTACCGT**CTGA**  
**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT  
 TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: SgfI-MluI


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<b>ACCN:</b>	NM_001164761
<b>Insert Size:</b>	1146 bp
<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
<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>	<a href="#">NM_001164761.1</a>
<b>RefSeq Size:</b>	2554 bp
<b>RefSeq ORF:</b>	1146 bp
<b>Locus ID:</b>	5575
<b>UniProt ID:</b>	<a href="#">P31321</a>
<b>Cytogenetics:</b>	7p22.3
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Apoptosis, Insulin signaling pathway
<b>MW:</b>	43.1 kDa

**Gene Summary:**

The protein encoded by this gene is a regulatory subunit of cyclic AMP-dependent protein kinase A (PKA), which is involved in the signaling pathway of the second messenger cAMP. Two regulatory and two catalytic subunits form the PKA holoenzyme, disbands after cAMP binding. The holoenzyme is involved in many cellular events, including ion transport, metabolism, and transcription. Several transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Aug 2015]

Transcript Variant: This variant (1) represents the longest transcript. All of the variants encode the same protein. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.