

Product datasheet for RC228863

PRKAR1B (NM_001164761) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PRKAR1B (NM_001164761) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PRKAR1B
Synonyms:	PRKAR1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC228863 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCTCCCGCCCGCCTGCCCTCGGAGGAGGACGAGAGCCTGAAGGGCTGTGAGCTGTACGTGCAGC
TGCACGGGATCCAGCAGGTCTCAAAGACTGTATCGTCCACCTCTGCATCTCCAAGCCCCAACGCCCCAT
GAAGTTCCTCCGGGAGCACTTCGAGAAGCTGGAGAAGGAAGAAAACAGGCAGATTTTGGCGCGGCAAAAG
TCAAACACACAGTCGGACTCCCATGATGAGGAGGTGTCGCCACCCCCCGAACCCCTGTGGTGAAGGCC
GCCGCCGGCGAGGAGGCGTGAGTGCCGAGGTGTACACCGAGGAGGACGCCGTGCTCTACGTCAGGAAGGT
GATTCCTCAAGGACTACAAAACCATGACTGCGCTGGCCAAGGCCATCTCCAAGAAGCTGCTCTTCGCTCAC
CTGGATGACAACGAGAGGAGTGACATATTCGATGCCATGTTCCCTGTCACTCACATCGCTGGGGAGACTG
TTATACAGCAAGGGAATGAAGGAGACAACCTTCTATGTCGTTGATCAAGGGGAAGTGGATGTGTACGTGAA
CGGAGAGTGGGTGACCAACATCAGCGAGGGAGGCAGCTTCGGGGAGCTGGCGCTCATCTACGGCACCCCC
AGGGCTGCGACCGTGAAGCCAAGACGGACCTCAAGCTCTGGGGGATCGACCGGGACAGCTACCGGCCGA
TCCTTATGGGCAGCACGCTGAGGAAACGCAAGATGTACGAGGAGTTCCTCAGCAAGGTCTCCATCTAGA
GTCCCTGGAGAAGTGGGAGCGTCTGACCGTGGCGGATGCGCTGGAGCCCGTCCAGTTTGAAGATGGAGAG
AAAATCGTGGTCCAGGGAGAGCCTGGGGACGACTTTTACATCATCACGGAGGGCACCGCGTCCGTGCTGC
AGCGCCGTCCTCCCAATGAGGAGTACGTGGAGGTGGGGCGCTGGGACCCCTGACTACTTCGGGGAGAT
TGCACTGCTGCTGAACCGCCCCGGGCGGCCACTGTCGTGGCCCGGGGGCCCTCAAGTGTGTGAAGCTG
GACCGGCCCGCTTCGAGCGTGTGCTGGGGCCCTGCTCTGAGATCCTCAAGAGGAACATTACGCTTACA
ACAGCTTCATCTCCCTCACCGTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC228863 protein sequence
Red=Cloning site Green=Tags(s)

MASPPACPSEEDESLKGCEL YVQLHGIQQVLKDCIVHLCISKPERPMKFLREHFKELEKEENRQILARQK
 SNSQSDSHDEEVSP T P P N P V V K A R R R R G G V S A E V Y T E E D A V S Y V R K V I P K D Y K T M T A L A K A I S K N V L F A H
 L D D N E R S D I F D A M F P V T H I A G E T V I Q Q N E G D N F Y V V D Q G E V D V Y V N G E W V T N I S E G G S F G E L A L I Y G T P
 R A A T V K A K T D L K L W G I D R D S Y R R I L M G S T L R K R K M Y E E F L S K V S I L E S L E K W E R L T V A D A L E P V Q F E D G E
 K I V V Q G E P G D D F Y I I T E G T A S V L Q R R S P N E E Y V E V G R L G P S D Y F G E I A L L L N R P R A A T V V A R G P L K C V K L
 D R P R F E R V L G P C S E I L K R N I Q R Y N S F I S L T V

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6006_a05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001164761

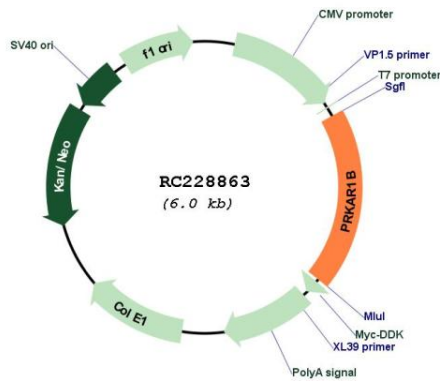
ORF Size: 1143 bp

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 or by calling 301.340.3188 option 3 for pricing and delivery.

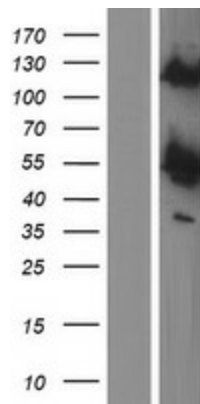
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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.
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:	NM_001164761.1 , NP_001158233.1
RefSeq Size:	2554 bp
RefSeq ORF:	1146 bp
Locus ID:	5575
UniProt ID:	P31321
Cytogenetics:	7p22.3
Protein Families:	Druggable Genome
Protein Pathways:	Apoptosis, Insulin signaling pathway
MW:	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]

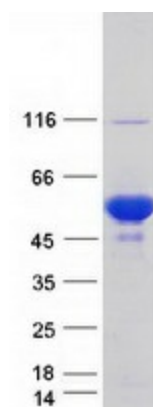
Product images:



Circular map for RC228863



Western blot validation of overexpression lysate (Cat# [LY431891]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC228863 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PRKAR1B protein (Cat# [TP328863]). The protein was produced from HEK293T cells transfected with PRKAR1B cDNA clone (Cat# RC228863) using MegaTran 2.0 (Cat# [TT210002]).