

Product datasheet for **RG207809**

PRKAR1B (NM_002735) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PRKAR1B (NM_002735) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PRKAR1B
Synonyms:	PRKAR1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG207809 representing NM_002735 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCTCCCCGCCGCTGCCCTCGGAGGAGGACGAGAGCCTGAAGGGCTGTGAGCTGTACGTGCAGC
TGCACGGGATCCAGCAGGTCTCAAAGACTGTATCGTCCACCTCTGCATCTCCAAGCCCCAACGCCCCAT
GAAGTTCTCCGGGAGCACTTCGAGAAGCTGGAGAAGGAAGAAAACAGGCAGATTTGGCGCGGCAAAAG
TCAAACACACAGTCGGACTCCCATGATGAGGAGGTGTCGCCACCCCCCGAACCCCTGTGGTGAAGGCC
GCCGCCGGCAGGAGGCGTGAGTGCCGAGGTGTACACCGAGGAGGACGCCGTGCTCTACGTCAGGAAGGT
GATTTCCAAGGACTACAAAACCATGACTGCGCTGGCCAAGGCCATCTCCAAGAAGCTGCTCTTCGCTCAC
CTGGATGACAACGAGAGGAGTGACATATTCGATGCCATGTTCCCTGTCACTCACATCGCTGGGGAGACTG
TTATACAGCAAGGGAATGAAGGAGACAACCTTCTATGTCGTTGATCAAGGGGAAGTGGATGTGTACGTGAA
CGGAGAGTGGGTGACCAACATCAGCGAGGGAGGCAGCTTCGGGGAGCTGGCGCTCATCTACGGCACCCCC
AGGGCTGCGACCGTGAAGCCAAGACGGACCTCAAGCTCTGGGGATCGACCGGGACAGTACCGGGCGCA
TCCTTATGGGCAGCAGCTGAGGAAACGCAAGATGTACGAGGAGTTCCTCAGCAAGGTCTCCATCTAGA
GTCCCTGGAGAAGTGGGAGCGTCTGACCGTGGCGGATGCGCTGGAGCCCGTCCAGTTTGAAGATGGAGAG
AAAATTGTGGTCCAGGGAGAGCCTGGGGACGACTTTTACATCATCACGGAGGGCACCGCGTCCGCTGCTGC
AGCGCCGTCGCCCAATGAGGAGTACGTGGAGGTGGGGCGCTGGGACCCCTGACTACTTCGGGGAGAT
TGCACTGCTGCTGAACCGCCCCGGCGGCCACTGTCGTGGCCCGGGGGCCCTCAAGTGTGTGAAGCTG
GACCGGCCCGCTTCGAGCGTGTGCTGGGGCCCTGCTCTGAGATCCTCAAGAGGAACATTACGCTTACA
ACAGCTTCATCTCCCTCACCGTC

ACCGTACCGGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG207809 representing NM_002735
 Red=Cloning site Green=Tags(s)

MASPPACPSEEDSLKGCELYVQLHGIQQVLKDCIVHLCISKPERPMKFLREHFLEKEENRQILARQK
 SNSQSDSHDEEVSPTPPNPVVKARRRRGGVSAEVYTEEAVSYVRKVIIPKDYKMTALAKAISKNVLF
 LDDNERSDIFDAMFPVTHIAGETVIQQNEGDNFYVVDQGEVDVYVNGEWTNISEGGSFGELAL
 IYGTP RAATVKAKTDLKLGIDRDSYRRILMGSTLRKRKMYEEFLSKVSILESLEKWERLTVADALEP
 VQFEDGE KIVVQGEPGDDFYIITEGTASVLQRRSPNEEYVEVGRLGPSDYFGEIALLLNRPRAATV
 VARGPLKCVKL DRPRFERVLGPCSEILKRNIQRYNSFISLTV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002735

ORF Size: 1143 bp

OTI Disclaimer: 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:

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_002735.2](#)

RefSeq Size: 1932 bp

RefSeq ORF: 1146 bp

Locus ID: 5575

UniProt ID: [P31321](#)

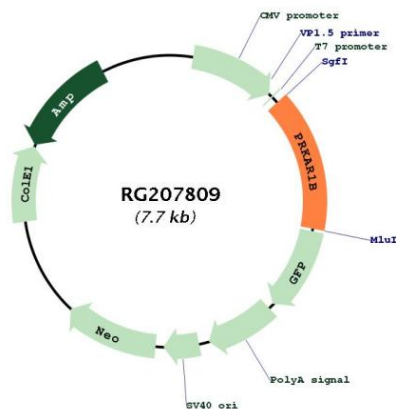
Cytogenetics: 7p22.3

Protein Families: Druggable Genome

Protein Pathways: Apoptosis, Insulin signaling pathway

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 RG207809