

Product datasheet for SC124688

PRKAR1B (NM_002735) Human Untagged Clone

Product data:

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|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | PRKAR1B (NM_002735) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | PRKAR1B |
| Synonyms: | PRKAR1 |
| Mammalian Cell Selection: | None |
| Vector: | <u>pCMV6-XL6</u> |
| E. coli Selection: | Ampicillin (100 ug/mL) |
| Fully Sequenced ORF: | >OriGene ORF within SC124688 sequence for NM_002735 edited (data generated by NextGen Sequencing) |

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ATGGCCTCCCCGCCCGCTGCCCTCGGAGGAGGACGAGAGCCTGAAGGGCTGTGAGCTG
TACGTGCAGCTGCACGGGATCCAGCAGGTCTCAAAGACTGTATCGTCCACCTCTGCATC
TCCAAGCCCGAACGCCCATGAAGTTCCTCCGGGAGCACTTCGAGAAGCTGGAGAAGGAA
GAAAACAGGCAGATTTTGGCGCGCAAAAGTCAAACCTCACAGTCGGACTCCCATGATGAG
GAGGTGTCGCCCACCCCGCAACCCTGTGGTGAAGGCCCGCCGCGGAGGAGGCGTG
AGTGCCGAGGTGTACACCGAGGAGGACGCCGTGTCTACGTGAGGAAGGTGATCCCAAG
GACTACAAAACCATGACTGCGCTGGCCAAGGCCATCTCCAAGAACGTGCTCTTCGCTCAC
CTGGATGACAACGAGAGGAGTGACATATTCGATGCCATGTTCCCTGTCACTCACATCGCT
GGGGAGACTGTTATACAGCAAGGGAATGAAGGAGACAACCTCTATGTCGTTGATCAAGGG
GAAGTGGATGTGTACGTGAACGGAGAGTGGGTGACCAACATCAGCGAGGGAGGCAGCTTC
GGGGAGCTGGCGCTCATCTACGGCACCCCGAGGGCTGCGACCGTAAAAGCCAAGACGGAC
CTCAAGCTCTGGGGGATCGACCGGGACAGCTACCGGCGCATCCTTATGGGCAGCACGCTG
AGGAAACGCAAGATGTACGAGGAGTTCCTCAGCAAGGTCTCCATCCTAGAGTCCCTGGAG
AAGTGGGAGCGTCTGACCGTGGCGGATGCGCTGGAGCCCGTCCAGTTTGAAGATGGAGAG
AAAATTGTGGTCCAGGGAGAGCCTGGGGACGACTTTTACATCATCACGGAGGGCACCCGG
TCCGTGCTGCAGCGCCGGTCCCCAATGAGGAGTACGTGGAGGTGGGGCGCCTGGGACCC
TCTGACTACTTCGGGGAGATTGCACTGCTGTAACCGGCCCGCCGCGCCACTGTGCTG
GCCCGGGGCCCTCAAGTGTGTGAAGCTGGACCGGCCCGCTTCGAGCGTGTGCTGGGG
CCCTGCTGTGAGATCCTCAAGAGAACATTACGCGTTACAACAGCTTCATCTCCCTCACC
GTCTGA

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Clone variation with respect to NM_002735.2



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|-------------------------------------|---|
| 5' Read Nucleotide Sequence: | >OriGene 5' read for NM_002735 unedited NNNCCTTTTTACCCCGCCGTTGACGCAAAGGGCGGTAGGCGTGTACGGTGGGAGGTCTA TATAAGCAGAGCTCATTTAGGTGACACTATAGAATACAAGCTACTTGTCTTTTTGCAGC GGCCGCGAATTCGGCACGAGGGCCATGGCCTCCCCGCCGCTGCCCTCGGAGGAGGAC GAGAGCCTGAAGGGCTGTGAGCTGTACGTGCAGCTGCACGGGATCCAGCAGGTCTCAA GACTGTATCGTCCACCTCTGCATCTCCAAGCCCAGCCCATGAAGTTCCTCCGGGAG CACTTCGAGAAGCTGGAGAAGGAAGAAAACAGGCAGATTTGGCGCGCAAAAGTCAAAC TCACAGTCGGACTCCCATGATGAGGAGGTGTCGCCACCCCGAACCCTGTGGTGAAG GCCCGCCGCCGGCAGGAGGCGTGAGTGCCGAGGTGTACACCGAGGAGGACGCCGTGTCC TACGTCAGGAAGGTGATCCCAAGGACTACAAAACCATGACTGCGCTGGCCAAGGCCATC TCCAAGAACGTGCTCTTCGCTCACCTGGATGACAACGAGAGGAGTGACATATTCGATGCC ATGTTCCCTGCTCACTCACATCGCTGGGGAGACTGTTATACAGCAAGGGAATGAAGGAGAC AACTTCTATGTCGTTGATCAAGGGGAAGTGGATGTGTACGTGAACGGAGAGTGGGTGACC AACATCAGCGAGGAGGCAGCTNTCGNGAGCTGGCGCTCATCTACCGCACCTCAGGGCT GCGACCGTGAAAGCCAAGACGGACTCCAGCTCTGGGGATCGACCTGGACAGCTACCTG CGCATCTTATGGGCAGCACGCTGANGCAACGCAGAT |
| Restriction Sites: | NotI-NotI |
| ACCN: | NM_002735 |
| Insert Size: | 1950 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: | NM_002735.1 , NP_002726.1 |
| 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]

Transcript Variant: This variant (2) differs in the 5' UTR compared to variant 1. 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.