

Product datasheet for **RC232622**

Protein Kinase A regulatory subunit I alpha (PRKAR1A) (NM_001276289) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Protein Kinase A regulatory subunit I alpha (PRKAR1A) (NM_001276289) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Protein Kinase A regulatory subunit I alpha
Synonyms:	ACRDYS1; ADOHR; CAR; CNC; CNC1; PKR1; PPNAD1; PRKAR1; TSE1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC232622 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGTCTGGCAGTACCGCCAGTGGAGGACGCAGCCTTCGAGAATGTGAGCTCTACGTCCAGA
 AGCATAACATTC AAGCGCTGCTCAAAGATTCTATTGTGCAGTTGTGCACTGCTCGACCTGAGAGACCCAT
 GGATTCTCAGGGAATACTTTGAGAGGTTGGAGAAGGAGGAGGCAAAACAGATTCAGAATCTGCAGAAA
 GCAGGCACTCGTACAGACTCAAGGGAGGATGAGATTTCTCCTCCTCCACCCAACCCAGTGGTTAAAGGTA
 GGAGGCGACGAGGTGCTATCAGCGCTGAGGTCTACACGGAGGAAGATGCGGCATCCTATGTTAGAAAGGT
 TATACCAAAGATTACAAGACAATGGCCGCTTTAGCCAAAGCCATTGAAAAGAATGTGCTGTTTTACAT
 CTTGATGATAATGAGAGAAGTGATTTTTGATGCCATGTTTTCGGTCTCCTTTATCGCAGGAGAGACTG
 TGATTCAGCAAGGTGATGAAGGGGATAACTTCTATGTGATTGATCAAGGAGAGACGGATGTCTATGTTAA
 CAATGAATGGGCAACCAAGTGTGGGGAAGGAGGGAGCTTTGGAGAAGTCTTTGATTTATGGAACACCG
 AGAGCAGCCACTGTCAAAGCAAAGACAAATGTGAAATTGTGGGCATCGACCGAGACAGCTATAGAGAA
 TCCTCATGGGAAGCACACTGAGAAAGCGGAAGATGTATGAGGAATTCCTTAGTAAAGTCTCTATTTTAGA
 GTCTCTGGACAAGTGGGAACGTCTACGGTAGCTGATGCATTGGAACCAAGTGCAGTTTGAAGATGGGCAG
 AAGATTGTGGTGCAGGGAGAACCAGGGGATGAGTTCCTCATTATTTAGAGGGGTGAGCTGCTGTGCTAC
 AACGTCGGTCAGAAAATGAAGAGTTTGTGAAGTGGGAAGATTGGGGCCTTCTGATTATTTTGGTGAAT
 TGCACTACTGATGAATCGTCTCGTGTGCCACAGTTGTGCTCGTGGCCCTTGAAGTGCCTTAAGCTG
 GACCGACCTAGATTTGAACGTGTTCTTGGCCATGCTCAGACATCCTCAAACGAAACATCCAGCAGTACA
 ACAGTTTTGTGCTACTGTCTGTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC232622 protein sequence
 Red=Cloning site Green=Tags(s)

MESGSTAASEEARSLRECELYVQKHNIQALLKDSIVQLCTARPERPMAFLREYFERLEKEEAKQIQNLQK
 AGTRTDSREDEISPPPPNPVVKRRRRGAI SAEVYTEEDAASYVRKVIPKDYKTMALAKAIEKNVLF SH
 LDDNERSDIFDAMF SVSFIAGETVIQQGDEGDNFYVIDQGETDVYVNNWATS VGE GGSFGELAL IYGT P
 RAATVKAKTNVCLWIDRDSYRRILMGSTLRKRKMYEEFLSKVSILESLDKWERLTVADALEPVQFEDGQ
 KIVVQGE PGDEFFIILEGSAAVLQRRSENEEFVEVGR LGPSDYFGEIALLMNRPRAAATVVARGPLKCVKL
 DRPRFERVLGPCSDILKRNIQQYNSFVLSLV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6013_d05.zip

Restriction Sites:

Sgfl-Mlul

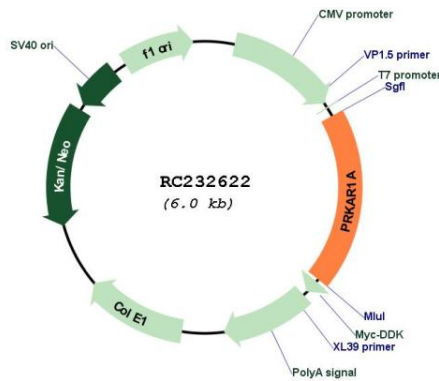
Protein Families: Druggable Genome, Transcription Factors

Protein Pathways: Apoptosis, Insulin signaling pathway

MW: 43 kDa

Gene Summary: cAMP is a signaling molecule important for a variety of cellular functions. cAMP exerts its effects by activating the cAMP-dependent protein kinase, which transduces the signal through phosphorylation of different target proteins. The inactive kinase holoenzyme is a tetramer composed of two regulatory and two catalytic subunits. cAMP causes the dissociation of the inactive holoenzyme into a dimer of regulatory subunits bound to four cAMP and two free monomeric catalytic subunits. Four different regulatory subunits and three catalytic subunits have been identified in humans. This gene encodes one of the regulatory subunits. This protein was found to be a tissue-specific extinguisher that down-regulates the expression of seven liver genes in hepatoma x fibroblast hybrids. Mutations in this gene cause Carney complex (CNC). This gene can fuse to the RET protooncogene by gene rearrangement and form the thyroid tumor-specific chimeric oncogene known as PTC2. A nonconventional nuclear localization sequence (NLS) has been found for this protein which suggests a role in DNA replication via the protein serving as a nuclear transport protein for the second subunit of the Replication Factor C (RFC40). Several alternatively spliced transcript variants encoding two different isoforms have been observed. [provided by RefSeq, Jan 2013]

Product images:



Circular map for RC232622