

Product datasheet for RC204652

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OriGene Technologies, Inc.

PKI alpha (PKIA) (NM_181839) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: PKI alpha (PKIA) (NM 181839) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: PKI alpha
Synonyms: PRKACN1
Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC204652 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGACTGATGTGGAAACTACATATGCAGATTTTATTGCTTCAGGAAGAACAGGTAGAAGAAATGCAATAC ATGATATCCTGGTTTCCTCTGCAAGTGGCAACAGCAATGAATTAGCCTTGAAATTAGCAGGTCTTGATAT CAACAAGACAGAAGGTGAAGAAGATGCACAACGAAGTTCTACAGAACAAAGTGGGGAAGCCCAGGGAGAA

GCAGCAAAATCTGAAAGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC204652 protein sequence

Red=Cloning site Green=Tags(s)

 ${\tt MTDVETTYADFIASGRTGRRNAIHDILVSSASGNSNELALKLAGLDINKTEGEEDAQRSSTEQSGEAQGE}$

AAKSES

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Chromatograms: https://cdn.origene.com/chromatograms/mk6067 d09.zip

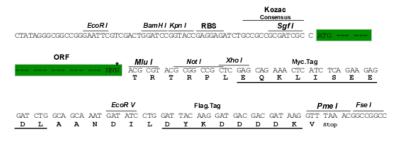
Restriction Sites: Sgfl-Mlul





Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_181839

ORF Size: 228 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

RefSeq: <u>NM 181839.3</u>

RefSeq Size: 4072 bp



 RefSeq ORF:
 231 bp

 Locus ID:
 5569

 UniProt ID:
 P61925

 Cytogenetics:
 8q21.13

Protein Families: Druggable Genome

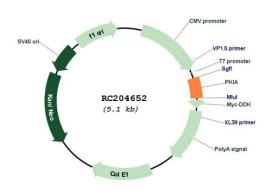
MW: 8 kDa

Gene Summary: The protein encoded by this gene is a member of the cAMP-dependent protein kinase (PKA)

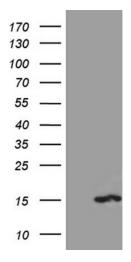
inhibitor family. This protein was demonstrated to interact with and inhibit the activities of both C alpha and C beta catalytic subunits of the PKA. Alternatively spliced transcript variants

encoding the same protein have been reported. [provided by RefSeq, Jul 2008]

Product images:

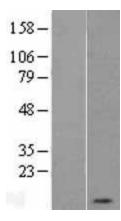


Circular map for RC204652



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PKIA (Cat# RC204652, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PKIA (Cat# [TA810311])(1:2000). Positive lysates [LY430578] (100ug) and [LC430578] (20ug) can be purchased separately from OriGene.





Western blot validation of overexpression lysate (Cat# [LY405612]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204652 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).