

Product datasheet for **RC220304**

PDE11A (NM_016953) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDE11A (NM_016953) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PDE11A
Synonyms:	PPNAD2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC220304 representing NM_016953
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCAGCCTCCCGCTGGACTTTGGGGAGGTGAAAACCTTCTGGCAGGCACCCAGAGTTGTTTGAAG
 ATTACTTGATGCGGAAGGGGAAGCAGGAGATGGTTGAAAAGTGGCTGCAGAGGCACAGTCAGGGTCAGGG
 GGCTTTAGGTCCAAGGCCCTCTTTGGCTGGTACCAGCAGCTTGGCTCACAGCACCTGCAGAGGTGGCAGC
 AGCGTTGGTGGTGGCACTGGACCAAATGGCTCTGCCACAGCCAGCCCTTCCCGGTGGCGGGGACTGTG
 GTGGGGTTCCTTGAGTCCCAGCTGGGCCGGTGGCAGCAGGGGCGATGGGAACCTGCAGCGGAGAGCTTC
 TCAGAAAGAGCTAAGGAAGAGTTTTGCCCGCTCCAAGGCCATCCACGTGAACAGGACCTACGATGAACAG
 GTGACCTCCCGGGCTCAGGAACCCCTGAGTAGTGTACGACGGAGGGCACTTCTCCGAAGGCAAGCTCCC
 TGCCCCCACCACAGCCATATTCTCAGTGCCTGCTGGAATCGAGAGTGAATCTGCCTCAGTATCCCC
 TACAGCCATCGACTACAAGTGCATCTGAAAAAGCATAATGAGCGTCAGTTCTTTCTGGAATTGGTCAA
 GATATCTCCAATGACCTTGACCTCACCAGCCTGAGCTACAAGATTCTCATCTTTGTCTGCCTTATGGTGG
 ATGCTGACCGCTGCTCTTTTTCTGGTGAAGGGGACAGCTGCTGGCAAGAAGACCTTGGTCTCCAAATT
 CTTTGTATGTCATGCAGGAACCCCTCTGCTGCCTTGCAGCAGCACAGAGAACTCAAATGAGGTGCAGGTC
 CCCTGGGGCAAAGGTATCATTGGCTATGTCCGGGAGCATGGAGAAACGGTCAACATTCCTGATGCCTACC
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 TTTACTGAAGATGATGAAAAAGTTATGCAGATGTATCTCCATTTTGTGGAATCGCCATATCTAACGCTC
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 TGATGTCCCAAAGTGCAGTGTGATGCTGAGAACAGTTTCAAAGAAAGCATGGAGAAATCATCATACTC
 CGACTGGCTAATAAATAACAGCATTGCTGAGCTGGTTGCTTCAACAGGCCTTCCAGTGAACATCAGTGT
 GCCTACCAGGATCCGCGCTTTGATGCAGAGGCAGACCAGATATCTGGTTTTCACATAAGATCTGTTCTTT
 GTGTCCCTATTTGGAATAGCAACCACCAATAATTGGAGTGGCTCAAGTGTAAACAGACTTGATGGGAA
 ACCTTTTGATGATGCAGATCAACGACTTTTTGAGGCTTTTGTATCTTTTGTGGACTTGGCATCAACAAC
 ACAATTATGATGATCAAGTGAAGAAGTCTGGGCCAAGCAGTCTGTGGCTCTTGATGTGCTATCATAACC
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 TTCATGGAGCTGGGGATGGTACAGAAATTTAAAATTGACTATGAGACACTGTGTAGGTGGCTTTTGACAG
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 GAGAATACGATTGGAACATCAAAAACCATCGTATATATTTTCGATCAATGTTAATGACAGCCTGTGACCT
 TGGAGCCGTGACCAAACCGTGGGAGATCTCCAGACAGGTGGCAGAACTTGTAAACAGTGAATTTCTCGAA
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 AACTGCCTCGGTTGCAACTGGAGTGGATTGATAGCATCTGCATGCCTTTGTATCAGGCACTGGTGAAGGT
 CAACGTGAAACTGAAGCCGATGCTAGATTCAAGTAGCTACAACAGAAAGTAAAGTGGGAAGAGCTACACCAA
 AAACGACTGCTGGCCTCAACTGCCTCATCTCCCTGCCAGTGTATGGTAGCCAAGGAAGACAGGAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC220304 representing NM_016953
 Red=Cloning site Green=Tags(s)

MAASRLDFGEVETFLDRHPELFEDYLMRKGKQEMVEKWLQRHSQGGALGPRPSLAGTSSLAHSTCRGGS
 SVGGGTGPNQSAHSQPLPGGGDCGGVPLSPSWAGGSRGDNLQRRASQKELRKSFARSKAIHVNRTYDEQ
 VTSRAQEPLSSVRRRALLRKASSLPPTTAHILSALLESRVNLQPYPPTAIDYKCHLKKHNERQFFLELVK
 DISNDLDTLSYKILIFVCLMVDADRCSLFLVEGAAAGKKTLSKFFDVHAGTPLLPCSSSTENSNEVQV
 PWGKGIIGYVGEHGETVNIIPDAYQDRRFNDEIDKLTGYKTKSLLCPIRSSDGEIIGVAQAINKIPEGAP
 FTEDDEKVMQMYLPFCGIAISNAQLFAASRKEYERSALLEVVNDLFEEQTDLEKIVKKIMHRAQTLLKC
 ERCSVLLLEDIESPVVKFTKSFELMSPKCSADAENSFKESMEKSSYDWLNNNSIAELVASTGLPVNISD
 AYQDPRFDAEADQISGFHIRSVLCVPIWNSNHQIIGVAQVLNRLDGKPFDDADQRLFEAFVIFCGLGINN
 TIMYDQVKKSWAKQSVALDVL SYHATCSKAEDVKFKAANIPLVSELAIDDIHFDDFSLDAMDITAALRM
 FMELGMVQKFKIDYETLCRWLLTVRKNYRMVLYHNWRHAFNVCQLMFAMLTAGFQDILTEVEILAVIVG
 CLCHDLHRGTNNAFQAKSGSALAQLYGT SATLEHHHFNHAVMILQSEGHNIFANLSSKEYSDLMLLQKQ
 SILATDLTYFERRTEFFELVSKGEYDWNKIKNRDIFRSMLMTACDLGAVTKPWEISRQVAELVTSEFFE
 QGDRERLELKLTPSAIFDRNRKDELPRQLLEWIDSI C MPLYQALVKVNVKLPMLDSVATNRSKWEELHQ
 KRLLASTASSSPASVMVAKEDRN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2678_b03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



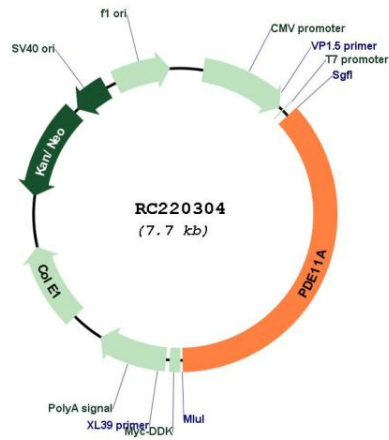
* The last codon before the Stop codon of the ORF

ACCN: NM_016953

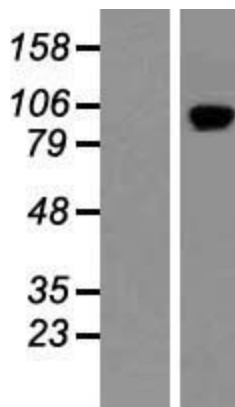
ORF Size: 2802 bp

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:	<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_016953.4
RefSeq Size:	9305 bp
RefSeq ORF:	2802 bp
Locus ID:	50940
UniProt ID:	Q9HCR9
Cytogenetics:	2q31.2
Domains:	PDEase, GAF, HDc
Protein Families:	Druggable Genome
Protein Pathways:	Progesterone-mediated oocyte maturation, Purine metabolism
MW:	104.6 kDa
Gene Summary:	The 3',5'-cyclic nucleotides cAMP and cGMP function as second messengers in a wide variety of signal transduction pathways. 3',5'-cyclic nucleotide phosphodiesterases (PDEs) catalyze the hydrolysis of cAMP and cGMP to the corresponding 5'-monophosphates and provide a mechanism to downregulate cAMP and cGMP signaling. This gene encodes a member of the PDE protein superfamily. Mutations in this gene are a cause of Cushing disease and adrenocortical hyperplasia. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

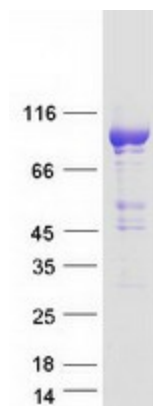
Product images:



Circular map for RC220304



Western blot validation of overexpression lysate (Cat# [LY413801]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220304 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PDE11A protein (Cat# [TP320304]). The protein was produced from HEK293T cells transfected with PDE11A cDNA clone (Cat# RC220304) using MegaTran 2.0 (Cat# [TT210002]).