

Product datasheet for **RC226806**

PDE2A (NM_001143839) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDE2A (NM_001143839) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PDE2A
Synonyms:	CGS-PDE; cGSPDE; PDE2A1; PED2A4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC226806 representing NM_001143839
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGTCTGGTGTGTCACCACATCCTCATCGTGTGTCCAATTCCTCAGCGGGGCCAGCAGGTCTTCC
 TCAAGCCGGACGAGCCGCCGCCGCCGAGCCATGCGCCGACAGCCTGCAGGACGCCTTGCTGAGTCT
 GGGCTCTGTCATCGACATTTTCAGGCCTGCAACGTGCTGTCAAGGAGGCCCTGTCAGCTGTCTCCCCGA
 GTGGAACTGTCTACACCTACCTACTGGATGGTGTGAGTCCCAGCTGGTGTGTGAGGACCCCCACATGAGC
 TGCCCCAGGAGGGGAAAGTCCGGGAGGCTATCATCTCCAGAAGCGGCTGGGCTGCAATGGGCTGGGCTT
 CTCAGACCTGCCAGGGAAGCCCTTGCCAGGCTGGTGGCTCCACTGGCTCCTGATACCCAAGTGTGGTC
 ATGCCGCTAGCGGACAAGGAGGCTGGGGCCGTGGCAGCTGTCTTTGGTGCAGTGTGGCCAGCTGAGTG
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 ATGCCTCTTCCCTGCAGCTCAAAGTGTCCAATACCTGCAGCAGGAGACCCGGGCATCCCCTGTGCCT
 CCTGCTGGTGTGCGGAGACAATCTCCAGCTTTCTTGAAGGTTCATCGGAGACAAAGTGTCTCGGGGAAGAG
 GTCAGCTTTCCCTTGACAGGATGCCTGGCCAGGTGGTGGAGACAAGAAGTCCATCCAGCTGAAGGACC
 TCACCTCCGAGGATGTACAACAGCTGCAGAGCATGTTGGGCTGTGAGCTGCAGGCCATGCTCTGTGTCCC
 TGTCTCAGCCGGGCCACTGACCAGGTGGTGGCCTTGGCTGCGCCTTCAACAAGCTAGAAGGAGACTTG
 TTCACCGACGAGGACGAGCATGTGATCCAGCAGTGTCTTCCACTACACCAGCACCCTGCTCACCAGCACC
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 GATCCTGAACATCCCTGACGCATATGCCATCCGCTTTTCTACCGCGCGTGGACGACAGCACCAGCTTTC
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 AATGAGATGATGATGTACCACATGAAGGTCTCCGATGATGAGTATACCAAATTTCCATGATGGGATCC
 AGCCTGTGGCTGCCATTGACTCCAATTTTGAAGTTTACCTATACCCCTCGTTCCCTGCCCGAGGATGA
 CACGTCCATGGCCATCCTGAGCATGCTGCAGGACATGAATTTTCATCAACAACACAAAATGACTGCCCCG
 ACCCTGGCCCCGTTCTGTTTGTGGTGAAGAAGGGCTACCGGGATCCCCCTACCACAACCTGGATGCACG
 CCTTTTCTGTCTCCACTTCTGTACTCTACAAGAACCTGGAGCTACCAAACCTACCTCGAGGACAT
 CGAGATCTTTGCCTTGTATTTCTGTCATGTGTGATGACCTGGACCACAGAGGCACAAACAACCTTTTC
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 ACAAGCTGTTGCAGGACCTGTCCCAAGCGGCAGAGCTGTACGAGCGCGTGGCCTCAACCGTGAGCA
 CTGGACCAAGGTGCCACAAGTTCACCATCCGCGGCCTCCCAAGTAACAACCTCGCTGGACTTCTGGAT
 GAGGAGTACGAGGTGCCTGATCTGGATGGCACTAGGGCCCCATCAATGGCTGTGCAGCCTTGATGCTG
 AG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC226806 representing NM_001143839
 Red=Cloning site Green=Tags(s)

MVLVHHILIAVVQFLRRGQQVFLKPDEPPPPQPCADSLQDALLSLGSVIDISGLQRAVKEALSAVLPR
 VETVYTYLLDGE SQLVCEDPPHEL PQEGKVREAIISQKRLGCNGLGFDLPGKPLARLVAPLAPDTQVLV
 MPLADKEAGAVAAVILVHCGQLSDNEEWSLQAVEKHTLVALRRVQVLQQRGPREAPRAVQNPPEGTAEQ
 KGGAAAYDRDRKILQLCGELYDL DASSLQLKVLQYLQEQETRASRCCLLLVSEDNLQLSCKVIGDKVLGEE
 VSFPLTGCLGQVVEDKKS IQLKDLTSEDVQQLQSM LGCELQAML CVPVISRATDQVVALACAFNKLEGL
 FTDEDEHVIQHCFHYTSTVLTSTLAFQKEQKLKCECQALLQVAKNLFTHLDDVSVLLQEII TEARNLSNA
 EICSVFLLDQNELVAKVFDGGVVDDES YEIRIPADQGIAGHVATTGQILNIPDAYAHP LFYRGVDDSTGF
 RTRNILCFPIKNENQEVI GVAELVNKINGPWF SKFDEDLATAFSIYCGISIAHSLLYKKNVNEAQYRSLA
 NEMMMYHMKVSDDEYTKLLHDGIQPVAAIDSNFASFTYTPRSLPEDDTSMAILSMLQDMNF INNYKIDCP
 TLARFCLMVKKGYRDPYPYHNMHAFSVSHFCYLLYKNLELTNYLEDIEIFALFISCMCHDLDRGTNNSF
 QVASKSVLAALYSSEGSVMERHHFAQAIAILNTHGCNIFDHF SRKDYQRMLDLMRDII LATDLAHLRIF
 KDLQKMAEVGYDRNNKQHHRLLLCLLMTSCDLSDQTKGWKTTRKIAELIYKEFFSQGDLEKAMGNRPMEM
 MDREKAYIPELQISFMEHIAMPIYKLLQDLFPAEELYERVASNREHWTKVSHKFTIRGLPSNNSLDFLD
 EEYEVPLDGTAPINGCCSLDAE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

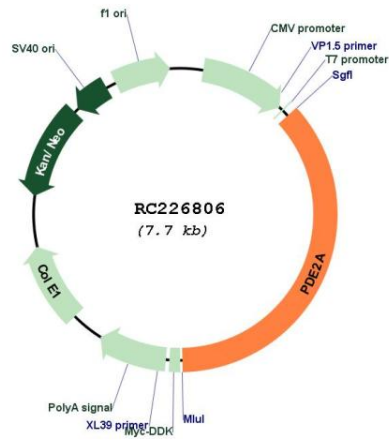


ACCN: NM_001143839

ORF Size: 2802 bp

OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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_001143839.4
RefSeq Size:	4146 bp
RefSeq ORF:	2805 bp
Locus ID:	5138
UniProt ID:	O00408
Cytogenetics:	11q13.4
Protein Families:	Druggable Genome
Protein Pathways:	Progesterone-mediated oocyte maturation, Purine metabolism
MW:	105.1 kDa
Gene Summary:	Cyclic nucleotide phosphodiesterase with a dual-specificity for the second messengers cAMP and cGMP, which are key regulators of many important physiological processes. Plays an important role in growth and invasion of malignant melanoma cells (e.g. pseudomyxoma peritonei (PMP) cell line) (PubMed:24705027).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC226806