

Product datasheet for **RG235036**

PDE2A (NM_001243784) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDE2A (NM_001243784) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PDE2A
Synonyms:	CGS-PDE; cGSPDE; PDE2A1; PED2A4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>RG235036 representing NM_001243784
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCGCCGACAGCCTGCAGCCAGCCTGGACCCCTTGCAAAGGAGCCAGGACCCCGAGGAGTAGAGACG
 ACCGACTGGAGGACGCCTTGCTGAGTCTGGGCTCTGTCATCGACATTTACGGCCTGCAACGTGCTGTCAA
 GGAGGCCCTGTCAGTGTGCTCCCCGAGTGAAACTGTCTACACCTACCTACTGGATGGTGTGAGTCCAG
 CTGGTGTGTGAGGACCCCCACATGAGCTGCCAGGAGGGAAAGTCCGGGAGGCTATCATCTCCAGAG
 AGCGGCTGGGCTGCAATGGGCTGGGCTTCTCAGACCTGCCAGGGAAGCCCTTGGCCAGGCTGGTGGCTCC
 ACTGGCTCCTGATACCAAGTGTGTCATGCCGCTAGCGGACAAGGAGGCTGGGGCCGTGGCAGCTGTC
 ATCTTGGTGCAGTGTGGCCAGCTGAGTATAATGAGGAATGGAGCCTGCAGGCGGTGGAGAAGCATAACC
 TGGTGCCTCGCGAGGGTGCAGGTCTGCAGCAGCGGGGCCAGGGAGGCTCCCGAGCCGTCCAGAA
 CCCCCGAGGGGACGGCGGAAGACCAGAAGGGCGGGCGGCGTACACCGACCGGACCGCAAGATCCTC
 CAACTGTGCGGGGAACTCTACGACTGGATGCCTCTTCCCTGCAGCTCAAAGTGCTCCAATACCTGCAGC
 AGGAGACCCGGGCATCCCGCTGCTGCCTCCTGCTGGTGTGCGGAGGACAATCTCCAGCTTTCTTGAAGT
 CATCGGAGACAAAGTGTCTGGGGAAGAGGTGAGCTTTCCCTTGACAGGATGCCTGGGCCAGGTGGTGGAA
 GACAAGAAGTCCATCCAGCTGAAGGACCTCACCTCCGAGGATGTACAACAGCTGCAGAGCATGTTGGGCT
 GTGAGCTGCAGGCCATGCTCTGTGTCCCTGTATCAGCCGGGCCACTGACCAGGTGGTGGCTTGGCCTG
 CGCCTTCAACAAGCTAGAAGGAGACTTGTTCACCGACGAGGACGAGCATGTGATCCAGCACTGCTCCAC
 TACACCAGCACCCTGCTCACCAGCACCTGGCCTTCCAGAAGGAACAGAACTCAAGTGTGAGTGGCAGG
 CTCTTCTCCAAGTGGCAAAGAACCTCTCACCCACCTGGATGACGTCTCTGTCTGCTCCAGGAGATCAT
 CACGGAGGCCAGAAACCTCAGCAACGCAGAGACTGCTCTGTGTCTGCTGGATCAGAATGAGCTGGTG
 GCCAAGGTGTTTCGACGGGGCGTGGTGGATGATGAGAGCTATGAGATCCGCATCCCGGCCGATCAGGGCA
 TCGCGGGACACGTGGCGACCACGGGCCAGATCCTGAACATCCCTGACGCATATGCCATCCGCTTTTCTA
 CCGCGGCTGGACGACAGCACCGGCTTCCGCACGCGCAACATCCTCTGCTTCCCATCAAGAACGAGAAC
 CAGGAGGTGATCGGTGTGGCCGAGCTGGTGAACAAGATCAATGGGCCATGGTTCAGCAAGTTCGACGAGG
 ACCTGGCGACGGCCTTCTCCATCTACTGCGGCATCAGCATCGCCATTCTCTCTATACAAAAAAGTGAA
 TGAGGCTCAGTATCGCAGCCACCTGGCCAATGAGATGATGATGTACCACATGAAGGTCTCCGATGATGAG
 TATACCAAATCTCCATGATGGGATCCAGCCTGTGGCTGCCATTGACTCCAATTTTGAAGTTTACCT
 ATACCCCTCGTTCCCTGCCGAGGATGACACGTCCATGGCCATCCTGAGCATGCTGCAGGACATGAATTT
 CATCAACAATAAAAATTGACTGCCCGACCTGGCCCGTTCTGTTTGTGTTGGAAGAAGGGCTACCGG
 GATCCCCCTACCAACTGGATGCACGCCTTTTCTGTCTCCACTTCTGCTACCTGCTCTACAAGAACC
 TGGAGCTCACCAACTACCTCGAGGACATCGAGATCTTGGCCTGTTTATTTCTGATGTGTGATGACCT
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 AACAAAGCAGCACACAGACTTCTCCTCTGCCTCCTCATGACCTCCTGTGACCTCTCTGACCAAGCAAGG
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 GGCCATGGGCAACAGGCCGATGGAGATGATGGACCGGGAAGGCCTATATCCCTGAGCTGCAAATCAGC
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 ACGAGCGCTGGCTCCAACCGTGAAGCTGGACCAAGGTGTCCCAAGTTCACCATCCGCGGCTCCC
 AAGTAACAACCTCGCTGGACTTCTGGATGAGGAGTACGAGGTGCCTGATCTGGATGGCACTAGGGCCCC
 ATCAATGGCTGCTGCAGCCTTGATGCTGAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG235036 representing NM_001243784
 Red=Cloning site Green=Tags(s)

MRRQPAASLDPLAKEPGPPGSRDDRLEDALLSLGSVIDISGLQRAVKEALSAVLPVETVYTYLLDGESQ
 LVCEDPPHELPPQEGKVREAIISQKRLGCNGLGFSDLPGKPLARLVAPLAPDTQVLMPLADKEAGAVAAV
 ILVHCGQLSDNEEWSLQAVEKHTLVALRRVQVLQQRGPREAPRAVQNPPEGTAEDQKGGAAAYTDRDRKIL
 QLCGELYDLASSLQLKVLQYLQQETRASRCLLLVSEDNLQLSCKVIGDKVLGEEVSFPLTGCLGQVVE
 DKKSIQLKDLTSEDVQQLQSMGLCELQAMLQVPIVSRATDQVVALACAFNKLEGLDFTDEDEHVIQHCFH
 YTSTVLSTLAFQKEQKLKCECQALLQVAKNLFTHLDDVSVLLQEII TEARNLSNAEICSVFLLDQNELV
 AKVFDGGVVDDESYEIRIPADQGIAGHVATTGQILNIPDAYAHLFYRGVDDSTGFRTRNLCFPIKNEN
 QEVIGVAELVNKINGPWFSKFDEDLATAFSIYCGISIAHSLLYKKVNEAQYRSHLANEMMMYHMKVSDDE
 YTKLLHDGIQPVAAIDSNFASFYTPRSLPEDDTSMAILSMLQDMNFINNYKIDCPTLARFCMLVKKGYR
 DPPYHNWMAHFSVSHFCYLLYKNELEIYALFISCMCHDLDRGTNNSFQVASKSVLAALYSS
 EGSVMERHHFAQAIILNTHGCNIFDHF SRKDYQRM LDMRDIILATDLAHLRIFKDLQKMAEVGYDRN
 NKQHHRLLLCLLMTSCDLS DQTKGWKTRKIAELIYKEFFSQGDLEKAMGNRPMEMMDREKAYIPELQIS
 FMEHIAMPIYKLLQDLFPKAAELYERVASNREHWTKVSHKFTIRGLPSNNSLDFLDEEYEVPLDGTTRAP
 INGCCSLDAE

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

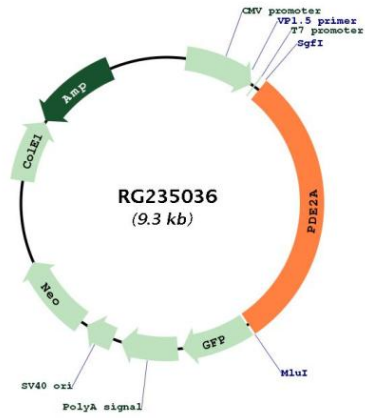
Cloning Scheme:



ACCN: NM_001243784

ORF Size:	2760 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_001243784.1 , NP_001230713.1
RefSeq Size:	4208 bp
RefSeq ORF:	2763 bp
Locus ID:	5138
UniProt ID:	O00408
Cytogenetics:	11q13.4
Protein Families:	Druggable Genome
Protein Pathways:	Progesterone-mediated oocyte maturation, Purine metabolism
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 RG235036