

## Product datasheet for **RG226806**

### **PDE2A (NM\_001143839) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PDE2A (NM_001143839) 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)



[View online »](#)

ORF Nucleotide  
Sequence:

>RG226806 representing NM\_001143839  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGTCTGGTGTGTCACCACATCCTCATCGTGTGTCCAATTCCTCAGCGGGGCCAGCAGGTCTTCC  
 TCAAGCCGGACGAGCCGCCGCCGCCGAGCCATGCGCCGACAGCCTGCAGGACGCCTTGCTGAGTCT  
 GGGCTCTGTCATCGACATTTTCAGGCCTGCAACGTGCTGTCAAGGAGGCCCTGTCAGCTGTGCTCCCCGA  
 GTGGAACTGTCTACACCTACCTACTGGATGGTGTGAGTCCCAGCTGGTGTGTGAGGACCCCCACATGAGC  
 TGCCCCAGGAGGGGAAAGTCCGGGAGGCTATCATCTCCAGAAGCGGCTGGGCTGCAATGGGCTGGGCTT  
 CTCAGACCTGCCAGGGAAGCCCTTGCCAGGCTGGTGGCTCCACTGGCTCCTGATACCCAAGTGTGGTC  
 ATGCCGCTAGCGGACAAGGAGGCTGGGGCCGTGGCAGCTGTCTTTGGTGCAGTGTGGCCAGCTGAGTG  
 ATAATGAGGAATGGAGCCTGCAGGCGGTGGAGAAGCATACCCTGGTCGCCCTGCGGAGGGTGCAGGTCT  
 GCAGCAGCGCGGGCCAGGGAGGCTCCCGAGCCGTCCAGAACCCCCGAGGGGACGGCGGAAGACCAG  
 AAGGGCGGGCGCGGTACACCGACCGCAGCCGAAAGATCCTCCAAGTGTGCGGGGAACTCTACGACCTGG  
 ATGCCTCTTCCCTGCAGCTCAAAGTGTCCAATACCTGCAGCAGGAGACCCGGGCATCCCCTGTGCTCCT  
 CCTGCTGGTGTGCGGAGACAATCTCCAGCTTTCTTGAAGGTGATCGGAGACAAAGTGTGCGGGGAAGAG  
 GTCAGCTTTCCCTTGACAGGATGCCTGGGCCAGGTGGTGGGAAGACAAGAAGTCCAATCCAGCTGAAGGACC  
 TCACCTCCGAGGATGTACAACAGCTGCAGAGCATGTTGGGCTGTGAGCTGCAGGCCATGCTCTGTGTCCC  
 TGTGATCAGCCGGGCCACTGACCAAGTGGTGGCCTTGGCTGCGCCTTCAACAAGCTAGAAGGAGACTTG  
 TTCACCGACGAGGACGAGCATGTGATCCAGCAGTGTCCACTACACCAGCACCCTGCTCACCAGCACCC  
 TGGCCTTCCAGAAGGAACAGAACTCAAGTGTGAGTGCCAGGCTTTCTCCAAGTGGCAAAGAACCTTCT  
 CACCCACCTGGATGACGCTCTGTCTGTCTCCAGGAGATCATCAGGAGGCCAGAACTCAGCAACGCA  
 GAGATCTGCTCTGTGTTCTGCTGGATCAGAATGAGCTGGTGGCCAAGGTGTTGACGGGGCGTGGTGG  
 ATGATGAGAGCTATGAGATCCGCATCCCGCCGATCAGGGCATCGCGGGACACGTGGCGACCACGGGCCA  
 GATCCTGAACATCCCTGACGCATATGCCATCCGCTTTTCTACCGCGCGTGGACGACAGCACCAGCTTCC  
 CGCACGCGCAACATCCTGTCTTCCCCAACAAGACGAGAACCAGGAGGTGATCGGTGTGGCCGAGCTGG  
 TGAACAAGATCAATGGGCCATGGTTCAGCAAGTTCGACGAGGACCTGGCGACGGCCTTCTCCATCTACTG  
 CGGCATCAGCATCGCCATTCTCTCTATACAAAAAGTGAATGAGGCTCAGTATCGCAGCCACCTGGCC  
 AATGAGATGATGATGTACCACATGAAGGTCTCCGATGATGAGTATACCAAATTTCTCCATGATGGGATCC  
 AGCCTGTGGCTGCCATTGACTCCAATTTTGAAGTTTACCTATACCCCTCGTTCCCTGCCCGAGGATGA  
 CACGTCCATGGCCATCCTGAGCATGCTGCAGGACATGAATTTTCATCAACAACACAAAATTGACTGCCCCG  
 ACCCTGGCCCCGTTCTGTTTGTGGTGAAGAAGGGCTACCGGGATCCCCCTACCACAACCTGGATGCACG  
 CCTTTTCTGTCTCCACTTCTGTACTCTACAAGAACCTGGAGCTACCAAATACCTCGAGGACAT  
 CGAGATCTTTGCCTTGTATTTCTGTCATGTGTGATGACCTGGACCACAGAGGCACAAACAACCTTTTC  
 CAGGTGGCCTCGAAATCTGTGCTGGTGGCTCTACAGCTCTGAGGGCTCCGTCATGGAGAGGCACCACT  
 TTGCTCAGGCCATCGCCATCCTCAACACCCAGGCTGCAACATCTTTGATCATTCTCCCGAAGGACTA  
 TCAGCGCATGCTGGATCTGATGCGGGACATCATCTTGGCCACAGACCTGGCCACCATCTCCGCATCTTC  
 AAGGACCTCCAGAAGATGGCTGAGGTGGGCTACGACCGAAACAACAAGCAGCACCACAGACTTCTCCTCT  
 GCCTCCTCATGACCTCCTGTGACCTCTGTGACCAGACCAAGGGCTGGAAGACTACGAGAAAGATCGCGGA  
 GCTGATCTACAAAGAATTCTTCTCCAGGGAGACCTGGAGAAGGCCATGGGCAACAGGCCGATGGAGATG  
 ATGGACCGGGAGAAGGCCTATATCCCTGAGCTGCAAAATCAGTTCATGGAGCACATTGCAATGCCATCT  
 ACAAGCTGTTGCAGGACCTGTTCCCAAGCGGCAGAGCTGTACGAGCGCGTGGCTCCAACCGTGAGCA  
 CTGGACCAAGGTGCCACAAGTTCACCATCCGCGGCTCCCAAGTAACAACCTCGCTGGACTTCTGGAT  
 GAGGAGTACGAGGTGCCTGATCTGGATGGCACTAGGGCCCCATCAATGGCTGCTGCAGCCTTGATGCTG  
 AG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



**OTI Disclaimer:** 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](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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.

**RefSeq:** [NM\\_001143839.4](#)

**RefSeq Size:** 4146 bp

**RefSeq ORF:** 2805 bp

**Locus ID:** 5138

**UniProt ID:** [O00408](#)

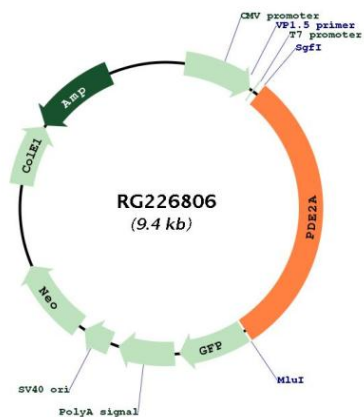
**Cytogenetics:** 11q13.4

**Protein Families:** Druggable Genome

**Protein Pathways:** Progesterone-mediated oocyte maturation, Purine metabolism

**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 RG226806