

## Product datasheet for **RG226195**

### **PDE4A (NM\_001111309) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PDE4A (NM_001111309) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PDE4A
Synonyms:	DPDE2; PDE4; PDE46
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RG226195 representing NM\_001111309  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGCGCTCCGGTGCAGCGCCCCGGGCCCGGCCCGCCCTGCCCTGGCACTGCCCCCCACGGGCCCG  
 AGTCCCTGACCCACTTCCCTTCAGCGATGAGGACACCCGTCGGCACCCCTCCGGGAGATCTGTCAGCTT  
 CGAGGCAGAGAATGGGCCGACACCATCTCTGGCCGAGCCCCCTGGACTCGCAGGCGAGCCAGGACTC  
 GTGCTGCACGCCGGGGGCCACCCAGCCAGCGCCGGGAGTCTTCTGTACCGCTCAGACAGCGACTATG  
 ACATGTACCCAAAGACCATGTCCCGAACTCATCGGTACCAGCGAGGCGCACGCTGAAGACCTCATCGT  
 AACACATTTGCTCAGGTGCTGGCCAGCCTCCGGAGCGTCCGTAGCAACTTCTCACTCCTGACCAATGTG  
 CCCGTTCCAGTAACAAGCGGTCCCGCTGGGCGGCCACCCCTGTCTGCAAGGCCAGCTGTGAGAAG  
 AAACGTGTGAGCAGTTGGCCGGGAGACTCTGGAGGAGCTGGACTGGTGTCTGGAGCAGCTGGAGACCAT  
 GCAGACCTATCGCTCTGTGAGCGAGATGGCCTCGCACAAGTTCAAAGGATGTTGAACCGTGTGAGCTCACA  
 CACCTGTGAGAAATGAGCAGGTCCGGAAACAGGTCTCAGAGTACATTTCCACAACATTCCTGGACAAC  
 AGAATGAAGTGGAGATCCCATCACCCACGATGAAGGAACGAGAAAAACAGCAAGCGCCGCGACCAAGACC  
 CTCCAGCCGCCCCCGCCCCCTGTACCACACTTACAGCCCATGTCCCAAATCACAGGGTTGAAAAAGTTG  
 ATGCATAGTAACAGCCTGAACAACCTAACATTCCTCCGATTTGGGGTGAAGACCGATCAAGAAGAGCTCC  
 TGGCCCAAGAACTGGAGAACCTGAACAAGTGGGCGCTGAACATCTTTTGGCGTGTGGGATTACGCTGGAGG  
 CCGCTCACTCACCTGCATCATGTACATGATTTCCAGGAGCGGGACCTGCTGAAGAAATTCGCATCCCT  
 GTGGACACGATGGTGACATACATGCTGACGCTGGAGGATCACTACCACGCTGACGTGGCTACCATAACA  
 GCCTGCACGAGCTGACGTGCTGACGCTCACCCACGTAAGTGTGCTGGCCAGCCTGCATGATGATGTT  
 CACGGACCTGGAGATTCTCGCCGCCCTTTCGCGGCTGCCATCCACGATGTGGATCACCCCTGGGGTCTCC  
 AACCGATTCTCATCAACACCAATTCGGAGCTGGCGCTCATGTACAACGATGAGTCGGTGTGAGAAATC  
 ACCACCTGGCCGTGGGCTTCAAGCTGCTGCAGGAGGACAACCTGCGACATCTTCCAGAACCTCAGCAAGCG  
 CCAGCGGCAGAGCCTACGCAAGATGGTCATCGACATGGTGTGGCCACGGACATGTCCAAGCACATGACC  
 CTCCTGGCTGACCTGAAGACCATGGTGGAGACCAAGAAAGTACCAGCTCAGGGGCTCCTCTGCTAGATA  
 ACTACTCCGACCGCATCCAGTCTCCGGAACATGGTGCATGTGCCGACCTCAGCAACCCACCAAGCC  
 GCTGGAGCTGTACCGCCAGTGGACAGCCGCATCATGGCCGAGTCTTCCAGCAGGGTACCAGAGAGCGC  
 GAGCGTGGCATGGAATCAGCCCATGTGTGACAAGCACACTGCCTCCGTGGAGAAGTCTCAGGTGGGTT  
 TTATTGACTACATTGTGCACCCATTGTGGGAGACTGGGCGGACCTTGTCCACCCAGATGCCAGGAGAT  
 CTTGGACACTTTGGAGGACAACCGGACTGGTACTACAGCGCCATCCGGCAGAGCCATCTCCGCCACCC  
 GAGGAGGAGTCAAGGGGGCCAGGCCACCCACCCCTGCCTGACAAGTTCAGTTTGTAGCTGACGCTGGAGG  
 AGGAAGAGGAGGAAGAAATATCAATGGCCAGATACCGTGCACAGCCCAAGAGGCATTGACTGCGCAGGG  
 ATTGTGAGGAGTGCAGGAAGCTCTGGATGCAACCATAGCTGGGAGGCATCCCGGCCAGGAGTCGTTG  
 GAAGTTATGGCACAGGAAGCATCCCTGGAGGCCGAGCTGGAGGCAGTGTATTTGACACAGCAGGCACAGT  
 CCACAGGCAGTGCACCTGTGGCTCCGGATGAGTTCTCGTCCCGGAGGAATTCGTGGTTGCTGTAAGCCA  
 CAGCAGCCCTCTGCCCTGGCTCTTCAAAGCCCCCTTCTCCCTGGTGGAGGACCCTGTCTGTTTCAGAG  
 CATGCCCCGGGCTCCCGGGCTCCCTCCACGCGGCCGAGGTGGAGGCCCAACGAGAGCACCAGGCTG  
 CCAAGAGGGCTTGCAGTGCCTGCGCAGGACATTTGGGAGGACACATCCGCACTCCAGCTCCTGGTGG  
 CGGGGGTTCAGGTGGAGACCCTACC

ACCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG226195 representing NM\_001111309  
 Red=Cloning site Green=Tags(s)

```

MRS GAAPRARPRPPALALPPTGPESLTHFPFSDEDTRRHPPGRSVSFEAENGPTSPGRSPLDSQASPL
VLHAGAATSQRRESFLYRSDSDYDMSPKTMSRNSSVTSEAHAEDLIVTPFAQVLASLRSVRSNFSLLTNV
PVPSNKRSP LGGPTPVCKATLSEETCQQLARETLEELDWCLEQLETMQTYRSVSEMASHKFKRMLNRELT
HLSEMSRSGNQVSEYI STTFLDKQNEVEIPSPTMKEREKQAPRPRPSQPPPPPPVPHLQPMSQITGLKKL
MHSNSLNNSNIPRFGVKTDQEELLAQELENLNKWL NIFCVSDYAGGRSLTCIMYMI FQERDLLKKFRIP
VDTMVTYMLTLEDHYHADVAYHNSLHAADV LQSTHVLLATPALDAVFTDLEILAALFAAAIHDVDHPGVS
NQFLINTNSELALMYNDES VLENHHLAVGFKLLQEDNCDIFQNL SKRQRQSLRKMVIDMVLATDMSKHMT
LLADLKT MVETKVTSSGVLLLDNYS DRIQVLRNMVHCADL SNPTKPLELYRQWTD RIMAEFFQQGDRER
ERGMEISPMCDKHTASVEKSQVGFIDYIVHPLWETWADL VHPDAQEILD TLEDNRDWYYSAIRQSPSPPP
EEEE SRGPGHPPLPDKFQFELTEEEEEEE ISMAQIPCTAQEALTAQGLSGVEEALDATI AWEASPAQESL
EVMAQEASLEAELEAVYLTQQAQSTGSAPVAPDEFSSREEFVVAVSHSSPSALALQSPLLPAWRTL SVSE
HAPGLPGLPSTAAEVEAQREHQAAKRAC SACAGTFGEDTSALPAPGGGGSGGDP T
  
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** Sgfl-Mlul

Cloning Scheme:



ACCN: NM\_001111309

ORF Size: 2475 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.

**RefSeq:** [NM\\_001111309.1](#), [NP\\_001104779.1](#)

**RefSeq Size:** 4503 bp

**RefSeq ORF:** 2478 bp

**Locus ID:** 5141

**UniProt ID:** [P27815](#)

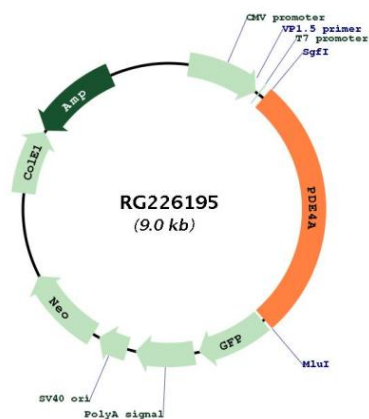
**Cytogenetics:** 19p13.2

**Protein Families:** Druggable Genome

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

**Gene Summary:** The protein encoded by this gene belongs to the cyclic nucleotide phosphodiesterase (PDE) family, and PDE4 subfamily. This PDE hydrolyzes the second messenger, cAMP, which is a regulator and mediator of a number of cellular responses to extracellular signals. Thus, by regulating the cellular concentration of cAMP, this protein plays a key role in many important physiological processes. Alternatively spliced transcript variants encoding different isoforms have been described for this gene.[provided by RefSeq, Jul 2011]

## Product images:



Circular map for RG226195