

## Product datasheet for **RG231369**

### **PDE4D (NM\_001197220) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PDE4D (NM_001197220) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PDE4D
Synonyms:	ACRDYS2; DPDE3; HSPDE4D; PDE4DN2; PDE43; STRK1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide  
Sequence:

>RG231369 representing NM\_001197220  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAGCATTATTATGAAGCCAAGATCCCGATCTACAAGTTCCTAAGGACTGCAGAGGCAGTTTGTTTTG  
 ATGTGGACAATGGCACATCTGCGGGACGGAGTCCCTTGGATCCCATGACCAGCCCAGGATCCGGGCTAAT  
 TCTCCAAGCAAATTTTGTCCACAGTCAACGACGGGAGTCCCTTCTGTATCGATCCGACAGCGATTATGAC  
 CTCTCTCAAAGTCTATGTCCCGGAACCTCCATTGCCAGTGATATACACGGAGATGACTTGATTGTGA  
 CTCCATTTGCTCAGGTCTTGGCCAGTCTGCGAACTGTACGAAACAACCTTGTGTCATTAACATAATTTGCA  
 AGATCGAGCACCTAGCAAAGATCACCCATGTGCAACCAACCATCCATCAACAAAGCCACCATAACAGAG  
 GAGGCCTACCAGAACTGGCCAGCGAGACCCTGGAGGAGCTGGACTGGTGTCTGGACCAGCTAGAGACCC  
 TACAGACCAGGCACTCCGTCAGTGAGATGGCTCCAACAAGTTTAAAAGGATGCTTAATCGGGAGCTCAC  
 CCATCTCTCTGAAATGAGTCGGTCTGAAATCAAGTGTGACAGTTTATATCAAACACATTCTTAGATAAG  
 CAACATGAAGTGAAATTCCTTCTCAACTCAGAAGGAAAAGGAGAAAAAGAAAGACCAATGTCTCAGA  
 TCAGTGGAGTCAAGAAATGATGCACAGCTCTAGTCTGACTAATCAAGTATCCCAAGGTTTGGAGTTAA  
 AACTGAACAAGAAGATGTCTTGCCAAGGAACTAGAAGATGTGAACAAATGGGGTCTTATGTTTTCAGA  
 ATAGCAGAGTTGTCTGGTAACCGGCCCTTGACTGTTATCATGCACACCATTTTTTCAGGAACGGGATTTAT  
 TAAAAACATTTAAATTCAGTAGATACTTTAATTACATATCTTATGACTCTCGAAGACCATTACCATGC  
 TGATGTGGCCTATCACAACAATATCCATGCTGCAGATGTTGTCCAGTCTACTCATGTGCTATTATCTACA  
 CCTGCTTTGGAGGCTGTGTTTACAGATTTGGAGATTCTTGACGCAATTTTTGCCAGTGAATACATGATG  
 TAGATCATCCTGGTGTGTCCAATCAATTTCTGATCAATACAAACTCTGAACCTTGCCTTGATGACAATGA  
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 TTCAGAAATTTGACCAAAAAACAAGACAATCTTTAAGGAAAATGGTCATTGACATCGTACTTGCAACAG  
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 CACCCTGACGCCAGGATATTTTGGACTTTGGAGGACAATCGTGAATGGTACCAGAGCACAATCCCTC  
 AGAGCCCCCTCTCCTGCACCTGATGACCCAGAGGAGGGCCGGCAGGGTCAAACCTGAGAAATTCAGTTTGA  
 ACTAATTTAGAGGAAGATGGTGAAGTCAAGACACGGAAAAGGACAGTGGCAGTCAAGTGAAGAAAGACT  
 AGCTGCAGTGAAGACTCTTTGACTCAAGACTCAGAGTCTACTGAAATCCCTTGTGAAACAGG  
 TTGAAGAGGAGGAGTAGGGGAAGAAGAGGAAAGCCAGCCTGAAGCCTGTGTCATAGATGATCGTTCTCC  
 TGACACG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG231369 representing NM\_001197220  
 Red=Cloning site Green=Tags(s)

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MSIIMKPRSRSTSSLRTAEAVCFDNDGTSAGRSPLDPMTSPGSGLILQANFVHSQRRESFLYRSDSDYD
LSPKSMRNSSIASDIHGDDLIVTPFAQVLAASLRTVRRNFAALTNLQDRAPSKRSPMCNQPSINKATITE
EAYQKLASETLEELDWCILDQLETLQTRHSVSEMASNKFKRMLNRELTHLSEMSRSGNQVSEFISNTFLDK
QHEVEIPSPPTQKEKEKKRPMQISGVKMLMHSSSLTNSSIPRFGVKTEQEDVLAKELDVNKWGLHVFR
IAELSGNRPLTVIMHTIFQERDLLKTFKIPVDTLITYLMTLEDHYHADVAYHNNIHAADVQSTHVLLST
PALEAVFTDLEILAAIFASAIHDVDHPGVSNQFLINTNSELALMYNDSSVLENHHLAVGFKLLQEENCDI
FQNLTKKQRQSLRKMVIDIVLATDMSKHMNLLADLKTVMETKKTSSGVLLLDNYSRIQVLQNMVHCAD
LSNPTKPLQLYRQWTDRIEMEEFRQGDREMERGMEISPMCDKHNASVEKSQVGFIDYIVHPLWETWADLV
HPDAQDILDLTLEDNREWYQSTIPQSPSPAPDDPEEGRQGQTEKFQFELTLEEDGESDTEKDSGSQVEEDT
SCSDSKTLCTQDSESTEIPLDEQVEEEAVGEEEEQPEACVIDDRSPDT
    
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001197220

**ORF Size:** 2037 bp

**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\\_001197220.2](#)

**RefSeq Size:** 8395 bp

**RefSeq ORF:** 2040 bp

**Locus ID:** 5144

**UniProt ID:** [Q08499](#)

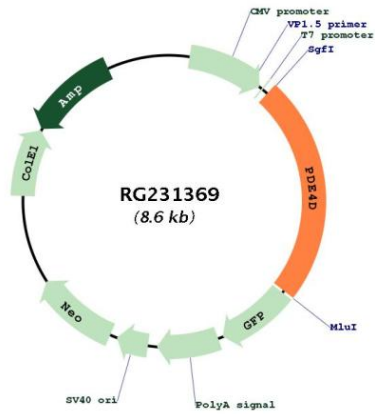
**Cytogenetics:** 5q11.2-q12.1

**Protein Families:** Druggable Genome

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

**Gene Summary:** This gene encodes one of four mammalian counterparts to the fruit fly 'dunce' gene. The encoded protein has 3',5'-cyclic-AMP phosphodiesterase activity and degrades cAMP, which acts as a signal transduction molecule in multiple cell types. This gene uses different promoters to generate multiple alternatively spliced transcript variants that encode functional proteins.[provided by RefSeq, Sep 2009]

Product images:



Circular map for RG231369