

Product datasheet for **RG231281**

PDE4D (NM_001197221) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDE4D (NM_001197221) 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:

>RG231281 representing NM_001197221
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGCCTCCAACAAGTTTAAAAGGATGCTTAATCGGGAGCTCACCCATCTCTCTGAAATGAGTCGGTCTG
 GAAATCAAGTGTGAGAGTTTATATCAAACACATCTTAGATAAGCAACATGAAGTGGAAATTCCTTCTCC
 AACTCAGAAGGAAAAGGAGAAAAAGAAAGACCAATGTCTCAGATCAGTGGAGTCAAGAAATGATGCAC
 AGCTCTAGTCTGACTAATTCAAGTATCCCAAGTTTGGAGTAAAAGTGAACAAGAAGATGTCCTTGCCA
 AGGAACTAGAAGATGTGAACAAATGGGGTCTTCATGTTTTCAGAAATAGCAGAGTTGTCTGGTAACCGGCC
 CTTGACTGTTATCATGCACACCATTTTTTCAGGAACGGGATTTATAAAAACATTTAAAATCCAGTAGAT
 ACTTTAATTACATATCTTATGACTCTCGAAGACCATTACCATGCTGATGTGGCCTATCACAACAATATCC
 ATGCTGCAGATGTTGTCCAGTCTACTCATGTGCTATTATCTACACCTGCTTTGGAGGCTGTGTTACAGA
 TTTGGAGATTCTGCAGCAATTTTTGCCAGTGAATACATGATGTAGATCATCCTGGTGTGTCCAATCAA
 TTTCTGATCAATACAACTCTGAACTTGCCTTGATGTACAATGATTCTCAGTCTTAGAGAACCATCATT
 TGGCTGTGGGCTTTAAATTTGCTTCAGGAAGAAAAGTGTGACATTTTCCAGAAATTTGACCAAAAAACAAG
 ACAATCTTTAAGGAAAATGGTCATTGACATCGTACTTGAACAGATATGTCAAAACATGAATCTACTG
 GCTGATTTGAAGACTATGGTTGAAACTAAGAAAGTGACAAGCTCTGGAGTTCTTCTTCTTGATAATTATT
 CCGATAGGATTACAGTCTTTCAGAAATATGGTGCAGTGTGAGTCTGAGCAACCCAAACAAAGCCTCTCCA
 GCTGTACCGCCAGTGGACGGACCGGATAATGGAGGAGTCTTCCGCCAAGGAGACCGAGAGAGGGAAACGT
 GGCATGGAGATAAGCCCCATGTGTGACAAGCACAATGCTTCCGTGGAAAAATCACAGTGGGCTTCATAG
 ACTATATTGTTTCATCCCCTCTGGGAGACATGGGCAGACCTCGTCCACCCTGACGCCAGGATATTTTGA
 CACTTTGGAGGACAATCGTGAATGGTACCAGAGCACAATCCCTCAGAGCCCTCTCCTGCACCTGATGAC
 CCAGAGGAGGGCCGCGCAGGGTCAAAGTGAAGAAATTCAGTTTGAAGTAACTTTAGAGGAAGATGGTGA
 CAGACACGGAAAAGGACAGTGGCAGTCAAGTGAAGAAGACACTAGCTGCAGTACTCCAAGACTCTTTG
 TACTCAAGACTCAGAGTCTACTGAAATCCCCTTGATGAACAGGTTGAAGAGGAGGCAGTAGGGGAAGAA
 GAGGAAAGCCAGCCTGAAGCCTGTGCATAGATGATCGTTCTCCTGACACG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG231281 representing NM_001197221
 Red=Cloning site Green=Tags(s)

MASNKFKRMLNRELTHLSEMSRSGNQVSEFISNTFLDKQHEVEIPSPTQKEKEKKRPMSSQISGVKLMH
 SSSLTNSSIPRFGVKTEQEDVLAKELEDVKNWGLHVFRIAELSGNRPLTVIMHTIFQERDLLKTFKIPVD
 TLITYLMTLEDHYHADVAYHNNIHAADVQSTHVLLSTPALEAVFTDLEILAAIFASAIHVDVHPGVSNQ
 FLINTNSELALMYNDSSVLENHHLAVGFKLLQEENCDFQNLTKKQRQSLRKMVIDIVLATDMSKHMNLL
 ADLKTMTVETKKVTSVGLLLDNYSRIQVLQNMVHCADLSNPTKPLQLYRQWTRIMEEFFRQGDRENER
 GMEISPMCDKHNASVEKSQVGFIDYIVHPLWETWADLVHPDAQDILDLEDNREWYQSTIPQSPSPAPDD
 PEEGRQQTKEFQFELTLEEDGESDTEKDSGSQVEEDTSCSDSKTLCTQDSESTEIPLDEQVEEAEVGE
 EESQPEACVIDDRSPDT

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_001197221

ORF Size: 1521 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 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.

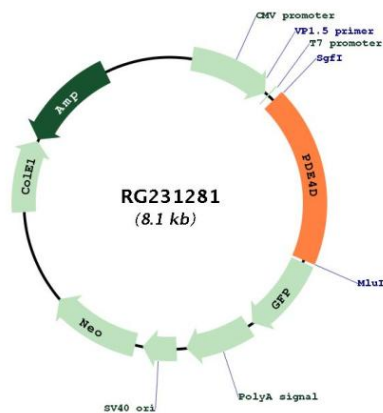
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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_001197221.2](#)

RefSeq Size:	7715 bp
RefSeq ORF:	1524 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 RG231281