

Product datasheet for **RC231325**

PDE4D (NM_001197222) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDE4D (NM_001197222) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PDE4D
Synonyms:	ACRDYS2; DPDE3; HSPDE4D; PDE4DN2; PDE43; STRK1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC231325 representing NM_001197222
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAAGGAGCAGCCCTCATGTGCCGGCACCGGGCATCCGAGCATGGCGGGGTATGGCAGGATGGCCCCCT
 TTGAACCTCGCTAGCGGACCCGTGAAGCGCTTGAGAACTGAGTCCCCTTTCCCTGTCTCTTCGCAGAGGA
 GGCTACCAGAACTGGCCAGCGAGACCCTGGAGGAGCTGGACTGGTGTCTGGACCAGCTAGAGACCCTA
 CAGACCAGGCACTCCGTCACTGAGATGGCCTCCAACAAGTTTAAAAGGATGCTTAATCGGGAGCTCACCC
 ATCTCTCTGAAATGAGTCGGTCTGGAAATCAAGTGTGAGAGTTTATCAAAACACATTCTTAGATAAGCA
 ACATGAAGTGGAAATTCCTTCTCCAACCTCAGAAGGAAAAGGAGAAAAAGAAAAGACCAATGTCTCAGATC
 AGTGGAGTCAAGAAATGATGCACAGCTCTAGTCTGACTAATTCAAGTATCCCAAGGTTTGGAGTAAAA
 CTGAACAAGAAGATGTCCTTGCCAAGGAACTAGAAGATGTGAACAATGGGGTCTTCATGTTTTCCAGAT
 AGCAGAGTTGCTGGTAACCGGCCCTTACTGTTATCATGCACACCATTTTTCCAGAACGGGATTTATTA
 AAAACATTTAAAATTCCAGTAGATACTTTAATTACATATCTTATGACTCTCGAAGACCATTACCATGCTG
 ATGTGGCCTATCACAAACATATCCATGCTGCAGATGTTGTCCAGTCTACTCATGTGCTATTATCTACACC
 TGCTTTGGAGGCTGTGTTTACAGATTTGGAGATTTCTTGACGAATTTTTGCCAGTGCAATACATGATGTA
 GATCATCTGGTGTGTCGAATCAATTTCTGATCAATACAACTCTGAACTTGCCCTTGATGTACAATGATT
 CCTCAGTCTTAGAGAACCATCAATTTGGCTGTGGCTTTAAATTGCTTCAGGAAGAAAAGTGTGACATTTT
 CCAGAAATTTGACCAAAAAACAAGACAATCTTTAAGGAAAATGGTCATTGACATCGTACTTGCAACAGAT
 ATGTCAAAACACATGAATCTACTGGCTGATTTGAAGACTATGGTTGAAACTAAGAAAGTGACAAGCTCTG
 GAGTCTTCTTCTTGATAAATTATCCGATAGGATTCAGGTTCTTCAGAATATGGTGCAGTGTGCAGATCT
 GAGCAACCCAACAAGCCTCTCCAGCTGTACCGCCAGTGGACGGACCGGATAATGGAGGAGTTCTCCGC
 CAAGGAGACCGAGAGAGGGAACGTGGCATGGAGATAAGCCCCATGTGTGACAAGCACAATGCTTCCGTGG
 AAAAATCACAGGTGGCTTCATAGACTATATTGTTTATCCCTCTGGGAGACATGGGCAGACCTCGTCCA
 CCCTGACGCCCAGGATATTTGGACTTTGGAGGACAATCGTGAATGGTACCAGAGCACAATCCCTCAG
 AGCCCTCTCCTGCACCTGATGACCCAGAGGAGGGCCGGCAGGGTCAAAGTGAAGAAATCCAGTTTGAAC
 TAACTTTAGAGGAAGATGGTGAATCAGACACGAAAAGGACAGTGGCAGTCAAGTGAAGAAGACACTAG
 CTGCAGTACTCAAGACTCTTTGACTCAAGACTCAGAGTCTACTGAAATCCCTTGATGAACAGGTT
 GAAGAGGAGGCAGTAGGGGAAGAAGAGGAAAGCCAGCCTGAAGCCTGTGTATAGATGATCGTTCTCCTG
 ACACG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC231325 representing NM_001197222
 Red=Cloning site Green=Tags(s)

MKEQPSCAGTGHPSMAGYGRMAPFELASGPVKRLRTESEPFPLFAEEAYQKLASETLEELDWCLDQLETL
 QTRHSVSEMANFKRMLNRELTHLSEMSRSGNQVSEFISNTFLDKQHEVEIPSPQKEKEKKRPMQSI
 SGVKKLMHSSSLTNSSIPRFGVKTEQEDVLAKELEDVNWGLHVFRIAEISGNRPLTVIMHTIFQERDLL
 KTFKIPVDLITYLMTLEDHYHADVAYHNNIHAADVQSTHVLLSTPALEAVFTDLEILAAIFASAIHVD
 DHPGVSQFLINTNSELALMYNDSSVLENHHLAVGFKLLQEENCDFQNLTKKQRQSLRKMVIDIVLATD
 MSKHMNLLADLKTVMVETKKVTSVGVLVLDNYSDRIQVLQNMVHCADLSNPTKPLQLYRQWDRIMEEFFR
 QGDRERERGMIEISPMCDKHNASVEKSQVGFIDYIVHPLWETWADLVHPDAQDILDLEDNREWYQSTIPQ
 SPSAPDDPEEGRQGQTEKFQFELTLEEDGESDTEKDSGSQVEEDTSCSDSKTLCTQDSESTEIPLDEQV
 EEEAVGEEEEESQPEACVDDRSPDT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8068_d11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001197222

ORF Size: 1755 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_001197222.2](#)

RefSeq ORF: 1758 bp

Locus ID: 5144

UniProt ID: [Q08499](#)

Cytogenetics: 5q11.2-q12.1

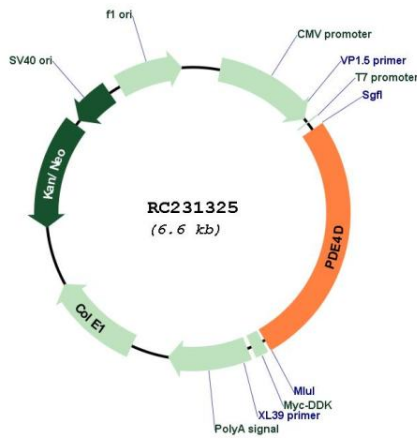
Protein Families: Druggable Genome

Protein Pathways: Progesterone-mediated oocyte maturation, Purine metabolism

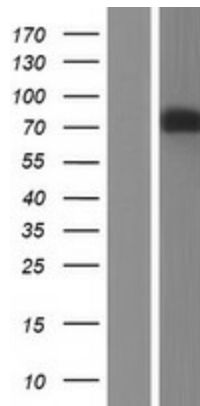
MW: 66.9 kDa

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 RC231325



Western blot validation of overexpression lysate (Cat# [LY434324]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC231325 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).