

## Product datasheet for **RR217319**

### **Pde2a (NM\_001270604) Rat Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Pde2a (NM_001270604) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pde2a
Synonyms:	CGS-PDE; Pde2; Pde2a2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide  
Sequence:

>RR217319 representing NM\_001270604  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCGCCGACAGCCTGCAGCCAGCCAGGACCCCTTGACAGAAGCCAGAGCCCCAGGGAGTAGAGACG  
 ACCGACTGGAGGATGCTTTGCTGAGCCTGGGCGCGTTATCGACATCGCGGGCCTTCGACAGGCTGCCAA  
 GGATGCCTCTCGGCCGTGCTCCCAAAGTGGAGACTGTCTACCTACCTGGTAGAGGGAGTCCAGG  
 CTGGTGTGTGAGGACCCCTCATGAGCTGCCACAGGAAGGAAAAATTCGAGAGGCTGTGATTTCTCGGA  
 AGCGGCTGAGCTGCGATGGGCTGGGACCTTCAGACCTACTAGGAAAGCCCTTGGCCAGGCTGGTGGCTCC  
 ACTGGCCCTGACACGCAAGTGTGTGTCATACCCTGCTGGACAAGGAGACTGGAAGTGTGGCAGCCGTC  
 ATCTTGGTGCCTGTGGCCAGCTGAGTGACAGTGAGGAGCAGAGCCTGCAGGTGGTGGAGAAGCATGCTC  
 TGGTGGCCCTGCAGAGGGTGCAGGCCCTGCAGCAGCGCAGGCCGAAGCTGTTTCCAGAACCTCAGCGGA  
 TCCCTCTGAAGATCAAAGGATGAGAAGGGATACACCGCCATGACCGAAAGATCCTGCAACTGTGTGGA  
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 CCACTCACTGCTGCCTCTGCTGGTGTGAGAGGACAACCTGCAGCTTTCCTGCAAGGTCAATTGGAGAGAA  
 AGTGTGGGAGAGAGGTGAGCTTTCATTGACCATGGGACGCCTGGGCCAGGTGGTGGAGGACAAAACAG  
 TGTATCCAGTTGAAGGACCTAACCTCTGACGATGTGCAACAGCTACAAAACATGTTGGGCTGTGAGCTTC  
 GGGCTATGCTATGTGTCCTGTGTCATCAGTCGAGCCACTGACCAGGTGGTGGCCCTGGCTTGGCCCTCAA  
 CAAGCTTGGAGGAGACTTCTTCCAGATGAGGATGAACGTGCGATCCAACACTGCTTCCACTACACAGGC  
 ACGTGGCTCACCAGTACCTTGGCCTTCCAGAAGGAGCAGAAGCTCAAGTGTGAGTGGCAGGCTCTTCTCC  
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 CAGAAAACCTCAGCAACGCAGAGATCTGCTCCGTGTTCCCTGCTGGATCAGAATGAGCTGGTTGCCAAGGTG  
 TTCGATGGCGGAGTAGTGGACGATGAGAGTTATGAGATCCGCATCCCTGCGGACCAAGGCATCGCGGGCC  
 ACGTGGCGACACGGCCAGATCCTGAACATCCCAGATGCATACGCCATCCGCTTTTCTATCGCGGCGT  
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 ATCGGTGTGGCTGAGCTAGTGAACAAGATCAATGGGCCATGGTTCAGCAAATTTGATGAGGACCTGGCCA  
 CAGCCTTCTCCATCTACTGTGGCATTAGCATCGCTCACTCTCTCCTATACAAAAGGTGAATGAAGCCCA  
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 GGTCTCTGCCTGAGGACGATACTTCTATGGCCATCCTGAGCATGCTGCAAGACATGAACTTCATCAATAA  
 CTACAAAATTGACTGCCAACTCTGGCCGGTTCTGCCTGATGGTGAAGAAAGGCTACCGGGATCCGCC  
 TACCACAACTGGATGCACGCCTTCTGCTCTCTCACTTTTGTACTTGTCTACAAGAATCTGGAGCTCT  
 CCAACTACCTCGAGGACATCGAGATCTTTGCGTTGTTATTTCTGATGTGTACGACCTGGACCACAG  
 AGGCACAAAACACTCCTTCCAGGTGGCCTCGAAATCTGTGCTGGCTGCACTCTACAGCTCAGAGGGCTCT  
 GTCATGGAGAGGCACCACTTTGCTCAGGCCATTGCTATCCTCAACACCCATGGCTGTAATATCTTTGACC  
 ACTTCTCTCGGAAGGACTATCAGCGAATGCTGGACCTGATGAGGGACATCATCTTGGCCACGGACCTGGC  
 ACACCACCTCCGCATCTTCAAGGACCTGCAGAAGATGGCTGAAGTGGTTATGACCGAAACAACAAGCAA  
 CACCACAGGCTTCTTATGCCTCCTTATGACCTCCTGTGACCTCTGACCAGACAAAGGGCTGGAAGA  
 CCACCAGAAAATTGCGGAGCTGATCTACAAAGAGTTCTTCTCCAAGGAGACTTGGAGAAGGCCATGGG  
 CAACCGACCAATGGAGATGATGGATCGGGAGAAGGCCTACATCCCTGAACTTCAGATCAGCTTTATGGAG  
 CACATCGCCATGCCATCTACAAGCTGTTACAAGACCTGTTCCCAAGGCAGCAGAGCTGTATGAACGCG  
 TGGCCTCCAATCGTGAGCACTGGACCAAGGTGTCCACAAGTTACCATCCGAGGCTCCCCAGTAACAA  
 CTCGCTGGATTTCTGGATGAGGAATATGAGGTCCCTGATTTGGACGTCACCAGGGCTCCTGTCAATGGC  
 TGCTGCAGCCTCGAGGGC

AG**CGGACCG**ACGCGTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
 TGGATTACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RR217319 representing NM\_001270604  
 Red=Cloning site Green=Tags(s)

MRRQPAASQDPLAQKPEPPGSRDDRLEDALLSLGAVIDIAGLRQAAKDALSAVLPKVETVYTYLVDGESR  
 LVCEDPPHELPOEGKIREAVISRKRLSCDGLGPSDLLGKPLARLVAPLAPDTQVLVIPLLDKETGTVAAV  
 ILVHCQQLSDSEEQSLQVVEKHALVALQRVQALQRRPEAVQNTSADPSEDQKDEKGYTAHDRKILQLCG  
 ELYDLDATSLQLKVLRYLQQETQATHCCLLLVSEDNLQLSCKVIGEKVLGEEVSFPLTMGRLGQVVEDKQ  
 CIQLKDLTSDVQQLQNMGLCELRAMLCPVVISRATDQVVALACAFNKLGGDFFTDEDERAIQHCIFYTG  
 TVLTSTLAFQKEQKLKCECQALLQVAKNLFTHLDDVSVLLQEIITEARNLSNAEICSVFLLDQNELVAKV  
 FDGGVVDESIEIRIPADQGIAGHVATTGQILNIPDAYAHPLFYRGVDDSTGFRTRNLCFPIKNENQEV  
 IGVAELVNKINGPWFSKFDEDLATAFSIYCGISIAHSLLYKKVNEAQYRSHLANEMMYHMVSDDEYTK  
 LLHDGIQPVAAIDSNFANFTYTPRSLPEDDTSMAILSMLQDMNFINNYKIDCPTLARFCLMVKKGYRDP  
 YHNWMHAFSVSHFCYLLYKNLELSNYLEDIEIFALFISCMCHDLDRGTNNSFQVASKSVLAALYSEGS  
 VMERHHAQAIAILNTHGCNIFDHF SRKDYQRMLDLMRDILATDLAHLRIFKDLQKMAEVGYDRNNKQ  
 HHRLLLCLLMTSCDLSDQTKGWKTTRKIAELIYKEFFSQGDLEKAMGNRPMEMMDREKAYIPELQISFME  
 HIAMPIYKLLQDLFPAEELYERVASNREHWTKVSHKFTIRGLPSNNSLDFLDEEYVPLDVTTRAPVNG  
 CCSLEG

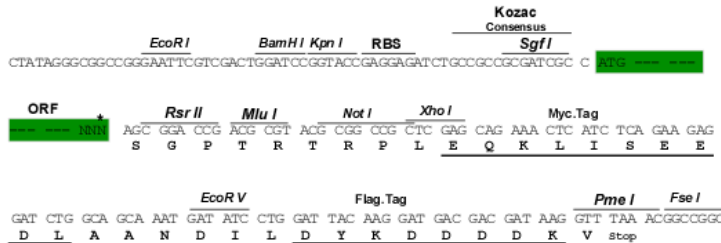
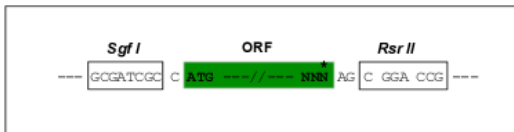
SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-RsrII

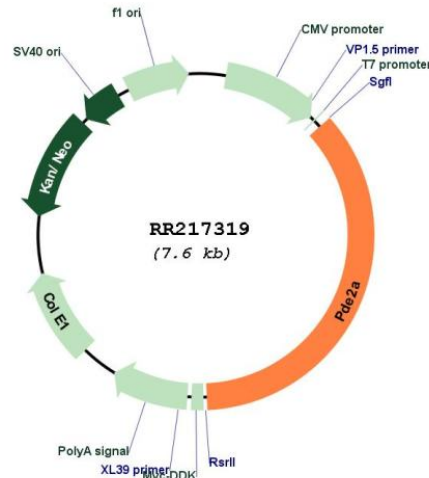
**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM\_001270604

ORF Size: 2748 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\\_001270604.2](#)

RefSeq Size: 4116 bp

RefSeq ORF: 2751 bp

Locus ID: 81743

Cytogenetics: 1q32

MW: 103.3 kDa

**Gene Summary:** activation induces decreased cAMP accumulation; involved in nitric oxide mediated signaling in cardiac fibroblasts [RGD, Feb 2006]