

## Product datasheet for **MR231382**

### **Pde2a (NM\_001243757) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Pde2a (NM_001243757) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pde2a
Synonyms:	CGS-PDE; cGSPDE
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>MR231382 representing NM\_001243757  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCGCCGACAGCCTGCAGCCAGCCAGGACCCCTTGACAGAAGCCAGAACCCCGAGGAGTAGAGACG  
 ACCGACTGGAGGATGCTTTGCTGAGCCTAGGCGCGTTATCGACATTGCTGGCCTGCGACAGGCTGCCAG  
 GGATGCCCTCTCAGCCGTGCTCCCAAAGTGGAGACTGTCTACACCTACCTGCTAGATGGGGAGTCCAGA  
 CTGGTGTGTGAGGACCCCTCATGAGCTGCCACAGGAAGGAAAAATTCGAGAAGCTGTGATCTCTCAGA  
 AGCGGCTGAGTTGCAATGGGCTGGGACCTTCGGACCTACTGGGAAAGCCCTTGGCCAGGCTGGTGGCTCC  
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 TGGTAGCCCTGCGGAGGGTGCAGGCCCTGCAGCAGCGCAGGCCTGAAGCTGTTCCAGAACAGTCACTGGA  
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 GAACTCTTTGACTTGGATGCTACTTCTCTGCAGCTCAAAGTCCTCAATATCTGCAGCAGGAGACACAGG  
 CCACTCACTGCTGCCTCCTGCTGGTGTGCGGAGGACAATCTACAGCTTTCCTGCAAGGTCAATGGAGACAA  
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 TGTATCCAGTTGAAGGACCTAACCTCTGACGATGTGCAACAGCTGCAAAACATGTTGGGTTGTGAGCTGC  
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 CAAGCTTGGAGGAGATTTCTTACAGATGAGGATGAACACGTGATCCAACACTGCTTCCACTACACAGGC  
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 ATGGTGTGGCTGAGCTAGTGAACAAGATCAATGGGCCATGGTTCAGCAAGTTTGATGAGGACCTGGCCA  
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 GGTCTCTGCCTGAGGACGACACTTCTATGGCCATCCTGAGCATGCTGCAAGACATGAACTTCATCAATAA  
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 GTCATGGAGAGGCACCACTTTGCTCAAGCCATTGCTATCCTCAACACCCACGGCTGCAATATCTTTGACC  
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 TGGCCTCAACCGTGGACTGGACCAAGGTGTCCACAAGTTCACCATCCGAGGCTCCCCAGTAACAA  
 CTCGCTGGATTTCTGGACGAGGAATACGAGGTCCCGATTTGGACGGCACCAAGACTCTGTCAATGGC  
 TGCTGCAGCCTCGAGGGC

**ACGCGT**ACGCGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAAGTTTAA

Protein Sequence: >MR231382 representing NM\_001243757  
 Red=Cloning site Green=Tags(s)

MRRQPAASQDPLAQKPEPPGSRDDRLDALLSLGAVIDIAGLRQAARDALSAVLPKVETVYTYLLDGESR  
 LVCEDPHELPPQEGKIREAVISQKRLSCNGLGPSDLLGKPLARL VAPLAPDMQVLVIPLLDKETGSAAV  
 ILVHCGQLSDSEEQSLQVVEKHALVALRRVQALQORREAVQNTSVDASEDQKDEKGYTDHDKILQLCG  
 ELFDLDATSLQLKVLQYLQQETQATHCLLLVSEDNLQLSCKVIGDKVLGEEVSFPLTMGRLGQVVEDKQ  
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 FDGGVVDDSEYERIPADQGIAGHVATTGQILNIPDAYAHPLFYRGVDDSTGFRTRNILCFPIKNENQEV  
 IGVAELVNKINGPWF SKFDEDLATAFSIYCGISIAHSLLYKKVNEAQYRSHLANEMMYHMKVSDDEYTK  
 LLHDGIQPVAAIDSNFANFTYTPRSLPEDDTSMAIL SMLQDMNF INNYKIDCPTLARFCLMVKKGYRDP  
 YHNWMHAFSVSHFCYLL YKNELSNYLEDIEIFALFISCMCHDLDRGTNNSFQVASKSVLAALYSSEGS  
 VMERHHAQAIAILNTHGCNIFDHF SRKDYQRM LDMRDIILATDLAHLRIFKDLQKMAE VGYDRNNRQ  
 HHRLLLCLLMTSCDLSDQTKGWKTRKIAELIYKEFFSQGDLEKAMGNRPMEMMDREKAYIPELQISFME  
 HIAMPIYKLLQDLFPKAAELYERVASNREHWTKVSHKFTIRGLPSNNSLDFLDEEYVPLDGTAPVNG  
 CCSLEG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

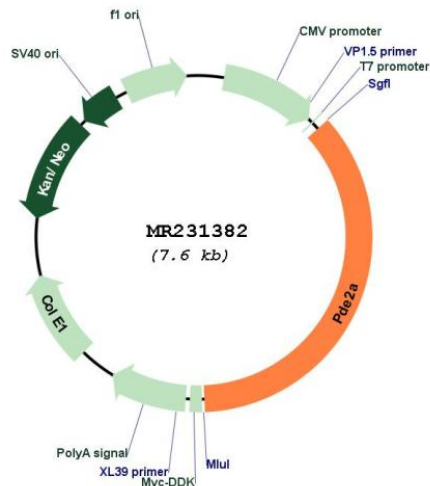
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001243757

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\\_001243757.1](#), [NP\\_001230686.1](#)

RefSeq Size: 4115 bp

RefSeq ORF: 2751 bp

Locus ID: 207728

Cytogenetics: 7 E2

MW: 103.7 kDa

**Gene Summary:**

Cyclic nucleotide phosphodiesterase with a dual-specificity for the second messengers cAMP and cGMP, which are key regulators of many important physiological processes.  
[UniProtKB/Swiss-Prot Function]