

## Product datasheet for **RC234414**

### **PDE1A (NM\_001258312) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PDE1A (NM_001258312) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PDE1A
Synonyms:	CAM-PDE-1A; CAM-PDE 1A; HCAM-1; HCAM1; HSPDE1A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC234414 representing NM\_001258312  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAGCATCATCATGGGTCTAGTGCCACAGAGATTGAAGAATTGAAAAACCACTTTTAAGTATCTTA  
 CAGGAGAACAGACTGAAAAATGTGGCAGCGCCTGAAAGGAATACTAAGATGCTTGGTGAAGCAGCTGGA  
 AAGAGGTGATGTTAACGTCGTCGACTTAAAGAAGAATATTGAATATGCGGCATCTGTGCTGGAAGCAGTT  
 TATATCGATGAAACAAGAAGACTTCTGGATACTGAAGATGAGCTCAGTGACATTCAGACTGACTCAGTCC  
 CATCTGAAGTCCGGGACTGGTTGGCTTCTACCTTTACACGGAAAAATGGGGATGACAAAAAGAACTCGA  
 GAAAAACCAAAATTTCCGAGCATTGTGCATGCTGTTCAAGCTGGAATTTTTGTGAAAGAATGTACCGA  
 AAAACATATCATATGGTTGGTTGGCATATCCAGCAGCTGTCATCGTAACATTAAGGATGTTGATAAAT  
 GGTCTTTCGATGATTTGCCCTAAATGAAGCAAGTGGAGAGCATAGTCTGAAGTTTATGATTTATGAACT  
 GTTTACCAGATATGATCTTATCAACCGTTTCAAGATTCCTGTTTCTTGCCTAATCACCTTTCGAGAAGCT  
 TTAGAAGTTGGTTACAGCAAGTACAAAAATCCATATCACAATTTGATTATGCAGCTGATGTCACCTCAA  
 CTGTGCATTACATAATGCTTCATACAGGTATCATGCAGCTGGCTCACTGAACTGGAATTTTGAATGGT  
 CTTTGTGCTGCCATTATGATTATGAGCATACAGGGACAACAACAACCTTTCACATTGAGACAAGGTCA  
 GATGTTGCCATTTTGTATAATGATCGCTCTGTCCTTGAGAATCACCACGTGAGTGACGCTTATCGACTTA  
 TGCAAGAAGAAGAAATGAATATCTTGATAAATTTATCCAAAGTACTGGAGGGATCTTCGGAACCTAGT  
 GATTGAAATGGTTTTATCTACAGACATGCAGGTCACTCCAGCAAAATAAAAATATAAGAAACAGTTTG  
 CAGCAGCTGAAGGATGACAGAGCCAAAACCATGTCCCTGATTCTCCACGCAGCAGACATCAGCCACC  
 CAGCCAAATCCTGGAAGCTGCATTATCGGTGGACCATGGCCCTAATGGAGGAGTTTTTCTGCAGGGAGA  
 TAAAGAAGCTGAATTAGGGCTTCCATTTTCCCACTTTGTGATCGGAAGTCAACCATGGTGGCCAGTCA  
 CAAATAGGTTTTCATCGATTTTCATAGTAGAGCCAACATTTTCTCTTCTGACAGACTCAACAGAGAAAATTG  
 TTATTCCTCTTATAGAGGAAGCCTCAAAAGCCGAACTTCTTCTATGTGGCAAGCAGCTCAACCACCAT  
 TGTGGGGTTACACATTGCTGATGCACTAAGACGATCAAATACAAAAGGCTCCATGAGTATGGGTCTAT  
 TCCCCAGACTACTCCCTTGACAGCAGTGGACCTGAAGAGTTTCAAGAACAACCTGGTGGACATCATTGAGC  
 AGAACAAAGAGAGGTGAAAAGAGTTAGCTGCACAAGGTGAATCTGATCTTATAAGAACTCAGAAGACTT  
 AGTAAATGCTGAAGAAAAACATGATGAGACACATTCA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC234414 representing NM\_001258312  
 Red=Cloning site Green=Tags(s)

MSIIMGSSATEIEELENTTFKYL TGEQTEKMWQRLK GILRCLVKQLERGDVNVVDL KKNIEYAASVLEAV  
 YIDETRLLDTEDELSDIQTDSPSEVRDWLASTFTRKMGMTKKKPEEKPKFRSIVHAVQAGIFVERMYR  
 KTYHMYGLAYPAAVIVTLKDVKWSFDV FALNEASGEHSLKFM IYELFTRYDLINRFKIPV SCLITFAEA  
 LEVGYSKYPYHNL IHAADVTQTVHYIMLHTGIMHWL TELEILAMVFAAAIHDYEHTGTTNNFHIQTRS  
 DVA ILYNDRSVLENHHVSAAYRLMQEEEMNIL INL SKDDWRDLRNLVIEMVLSTDMSGHFQQIKNIRNSL  
 QQPEGIDRAKTMSLILHAADISHPAKSWKLHYRWTMALMEEFFLQGDKEAELGLPFSPLCDR KSTMVAQS  
 QIGFIDFIVEPTFSLLDSTEKIV IPLIEEASKAETSSYVASSSTTIVGLHIADALRRSNTKGSMSDGSY  
 SPDYSLAAVDLKSFKNNLVDI IQQNKERWKELAAQGESDLHKNS EDLVNAEEKHDETHS

**TR**TRPLEQKLI SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:****ACCN:** NM\_001258312**ORF Size:** 1647 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\\_001258312.1](#), [NP\\_001245241.1](#)**RefSeq Size:** 4903 bp**RefSeq ORF:** 1650 bp**Locus ID:** 5136**Cytogenetics:** 2q32.1

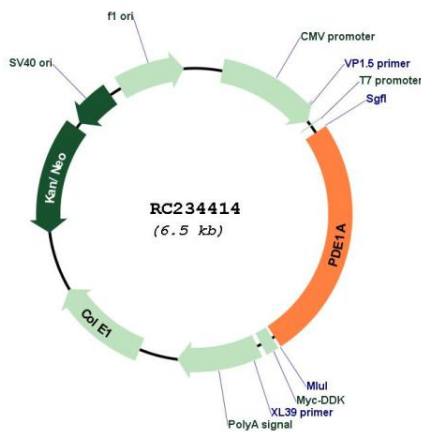
**Protein Families:** Druggable Genome

**Protein Pathways:** Calcium signaling pathway, Progesterone-mediated oocyte maturation, Purine metabolism, Taste transduction

**MW:** 63.2 kDa

**Gene Summary:** Cyclic nucleotide phosphodiesterases (PDEs) play a role in signal transduction by regulating intracellular cyclic nucleotide concentrations through hydrolysis of cAMP and/or cGMP to their respective nucleoside 5-prime monophosphates. Members of the PDE1 family, such as PDE1A, are Ca(2+)/calmodulin (see CALM1; MIM 114180)-dependent PDEs (CaM-PDEs) that are activated by calmodulin in the presence of Ca(2+) (Michibata et al., 2001 [PubMed 11342109]; Fidock et al., 2002 [PubMed 11747989]).[supplied by OMIM, Oct 2009]

**Product images:**



Circular map for RC234414