

## Product datasheet for **RC234336**

### **PDE1A (NM\_001258313) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PDE1A (NM_001258313) 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:**

>RC234336 representing NM\_001258313  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGATGACCATGTCACAATCAGGAAGAAACATCTCCAAAGACCCATCTTTAGACTAAGATGCTTGGTGA  
 AGCAGCTGAAAAGAGGTGATGTTAACGTCGTCGACTTAAAGAAGAATATTGAATATGCGGCATCTGTGCT  
 GGAAGCAGTTTATATCGATGAAACAAGAAGACTTCTGGATACTGAAGATGAGCTCAGTGACATTCAGACT  
 GACTCAGTCCCATCTGAAGTCCGGGACTGGTTGGCTTCTACCTTTACACGGAAAAATGGGGATGACAAAA  
 AGAAACCTGAGGAAAAACCAAAATTTCCGAGCATTGTGCATGCTTTCAAGCTGGAATTTTTGTGGAAG  
 AATGTACCGAAAAACATATCATATGGTTGGTTGGCATATCCAGCAGCTGTCATCGTAACATTAAGGAT  
 GTTGATAAATGGTCTTTTCGATGATTTGCCCTAAATGAAGCAAGTGGAGAGCATAGTCTGAAGTTTATGA  
 TTTATGAACTGTTTACCAGATATGATCTTATCAACCGTTTCAAGATTCCTGTTTCTTGCCTAATCACCTT  
 TGCAGAAGCTTTAGAAGTTGGTTACAGCAAGTACAAAAATCCATATCACAATTTGATTCATGCAGCTGAT  
 GCACTCAAACCTGTGCATTACATAATGCTTCATACAGGTATCATGCACTGGCTCACTGAACCTGGAATTT  
 TAGCAATGGTCTTTGCTGCTGCCATTATGATTATGAGCATACAGGGACAAACAACTTTTACATTCA  
 GACAAGGTGAGATGTTGCCATTTTGATAATGATCGCTCTGCTTGGAGAATCACACCGTGAAGTGCAGCT  
 TATCGACTTATGCAAGAAGAAGAAATGAATATCTTGATAAATTTATCCAAAGATGACTGGAGGGATCTTC  
 GGAACCTAGTGATTGAAATGGTTTTATCTACAGACATGTCAGGTCACCTCCAGCAAATTAATAATAAG  
 AAACAGTTTGCAGCAGCCTGAAGGGATTGACAGAGCCAAAACCATGTCCCTGATTCTCCACGCAGCAGAC  
 ATCAGCCACCCAGCCAAATCCTGGAAGCTGCATTATCGGTGGACCATGGCCCTAATGGAGGAGTTTTTCC  
 TGCAGGGAGATAAAGAAGCTGAATTAGGGCTTCCATTTTCCCACTTTGTGATCGGAAGTCAACCATGGT  
 GGCCCACTCACAATAGGTTTCATCGATTTCATAGTAGAGCCAAACATTTTCTCTTCTGACAGACTCAACA  
 GAGAAAATTGTTATTCTCTTATAGAGGAAGCCTCAAAAGCCGAACTTCTTCTATGTGCCAAGCAGCT  
 CAACCACCATTGTGGGTTACACATTGCTGATGCACTAAGACGATCAAATACAAAAGGCTCCATGAGTGA  
 TGGGTCTATTCCCAGACTACTCCCTTGACAGCAGTGGACCTGAAGAGTTTCAAGAACAACCTGGTGGAC  
 ATCATTACAGCAGAACAAGAGAGGTGAAAGAGTTAGCTGCACAAGAAGCAAGAACCAAGTTCACAGAAGT  
 GTGAGTTTATTCATCAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC234336 representing NM\_001258313  
 Red=Cloning site Green=Tags(s)

MDDHVTIRKKHLQRPIFRLRCLVKQLERGDVNVVDLKKNIEYAASVLEAVYIDETRRLLDTEDELSDIQT  
 DSVPSSEVRDWLASTFTRKMGMTKKKPEEKPKFRSIVHAVQAGIFVERMYRKYHVMGLAYPAAVIVTLKD  
 VDKWSEVDFALNEASGEHSLKFMIEYELFTRYDLINRFKIPVSCLITFAEALVGVSKYKNPYHNLIIHAAD  
 VTQTVHYIMLHTGIMHWLLEILAMVFAAAIHDEYHTGTTNNFHIQTRSDVAILYNDRSVLENHHVSAA  
 YRLMQEEEMNILINLSKDDWRDLRNLVIEMVLSTDMSGHFQQIKNIRNSLQQPEGIDRAKTMSLIIHAAD  
 ISHPAKSWKLYHRWTMALMEEFFLQGDKEAELGLPFSPLCDRKSTMVAQSQIGFIDFIVEPTFSLLDST  
 EKIVIIPLIEEASKAETSSYVASSSTTIVGLHIADALRRSNTKGSMSDGSYSPDYSLLAAVDLKSFKNNLVD  
 IIQQNKERWKELAAQEARTSSQKCEFIHQ

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



ACCN: NM\_001258313

ORF Size: 1557 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\\_001258313.1](#), [NP\\_001245242.1](#)

RefSeq Size: 2338 bp

RefSeq ORF: 1560 bp

Locus ID: 5136

UniProt ID: [P54750](#)

**Cytogenetics:** 2q32.1

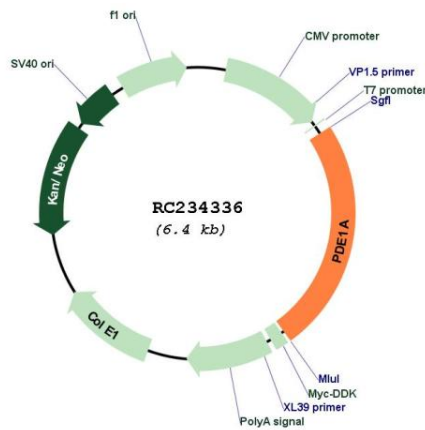
**Protein Families:** Druggable Genome

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

**MW:** 60 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 RC234336