

## Product datasheet for **RC228422**

### **PDE1B (NM\_001165975) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PDE1B (NM_001165975) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PDE1B
Synonyms:	HEL-S-79p; PDE1B1; PDES1B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC228422 representing NM\_001165975  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCAAACCCTGTTCTGTTCCAGAGGAGCCACCTCCAGGGCCCCATTCTCAGGCTGCGCTACATGGTGA  
 AGCAGTTGGAGAATGGGGAGATAAACATTGAGGAGCTGAAGAAAAATCTGGAGTACACAGCTTCTCTGCT  
 GGAAGCCGTCTACATAGATGAGACACGGCAATCTTGGACACGGAGGACGAGCTGCAGGAGCTGCGGTCA  
 GATGCCGTGCCTTCGGAGGTGCGGGACTGGCTGGCCTCCACCTTACCCAGCAGGCCCGGGCCAAAGGCC  
 GCCGAGCAGAGGAGAAGCCCAAGTTCGAAGCATTGTGCACGCTGTGCAGGCTGGGATCTTCGTGGAACG  
 GATGTTCCGGAGAACATACACCTCTGTGGGCCCACTTACTCTACTGCGGTTCTCAACTGTCTCAAGAAC  
 CTGGATCTCTGGTCTTTGATGTCTTTTCTTGAACCAGGCAGCAGATGACCATGCCCTGAGGACCATTG  
 TTTTGTAGTTGCTGACTCGGCATAACCTCATCAGCCGCTTCAAGATTCCTACTGTGTTTTGATGAGTTT  
 CCTGGATGCCTTGAGACAGGCTATGGGAAGTACAAGAATCCTTACCACAACCAGATCCACGCAGCCGAT  
 GTTACCCAGACAGTCCATTGCTTCTTGCTCCGCACAGGGATGGTGCACCTGTGCGGAGATTGAGCTCC  
 TGGCCATCATCTTTGCTGCAGCTATCCATGATTATGAGCACACGGGCACTACCAACAGCTCCACATCCA  
 GACCAAGTCAGAAATGTGCCATCGTGTACAATGATCGTTTCACTGCTGGAGAATCACCAATCAGCTCTGTT  
 TTCCGATTGATGCAGGATGATGAGATGAACATTTTTCATCAACCTCACCAAGGATGAGTTTGTAGAATCC  
 GAGCCCTGGTCATTGAGATGGTGTGGCCACAGACATGCTGCTGCCATTTCCAGCAAGTGAAGACCATGAA  
 GACAGCCTTGAACAGCTGGAGAGGATTGACAAGCCCAAGGCCCTGTCTACTGCTCCATGCTGCTGAC  
 ATCAGCCACCCAACCAAGCAGTGGTGGTCCACAGCCGTTGGACCAAGGCCCTCATGGAGGAATTTCTCC  
 GTCAGGGTGACAAGGAGGCAGAGTTGGGCTGCCCTTTTCTCCACTCTGTGACCGCACTTCCACTCTAGT  
 GGCACAGTCTCAGATAGGGTTCATCGACTTCAATGTGGAGCCACATTCTCTGTGCTGACTGACGTGGCA  
 GAGAAGAGTGTTAGCCCTGGCGGATGAGGACTCCAAGTCTAAAAACCAGCCAGCTTTTCAAGTGGCGCC  
 AGCCCTCTCTGGATGTGGAAGTGGGAGACCCCAACCTGATGTGGTCAAGCTTTGTTCCACCTGGGTCAA  
 GCGCATTGAGGAGAATAAGCAGAAATGGAAGGAACGGGCAGCAAGTGGCATCACCAACCAGATGTCCATT  
 GACGAGCTGTCCCCTGTGAAGAAGAGGCCCCCATCCCTGCCGAAGATGAACACAACCAGAATGGGA  
 ATCTGGAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC228422 representing NM\_001165975  
 Red=Cloning site Green=Tags(s)

MANPVPVQRSHLQGPILRLRYMVKQLENGEINIEELKKNLEYTASLLEAVYIDETRQILDTEDELQELRS  
 DAVPSEVRDWLASTFTQQARAKGRRAEKPKFRSIVHAVQAGIFVERMFRRTYTSVGPTYSTAVLNCLKN  
 LDLWCFDVFSLNQAADHALRTIVFELLTRHNLISRFKIPTVFLMSFLDALETGYKYNPNYHNQIHAAD  
 VTQTVHCFLLRTGMVHCLSEIELLAIIFAAAIHIDYEHTGTTNSFHIQTKSECAIVYNDRSVLENHHISSV  
 FRLMQDDEMNIFINLTKDEFVELRALVIEMVLATDMSCHFQQVTKMTALQQLERIDKPKALLLHAAD  
 ISHPTKQWLVHSRWTALMEEFFRQGDKEAELGLPFSPLCDRTSTLVAQSQIGFIDFIVEPTFSVLTQVA  
 EKSVMQPLADEDSKSKNQPSFQWRQPSLDVEVGDVNPVDFRSTWVKRIQENKQKWKERAASGITNQMSI  
 DELSPCEEEAPPSPAEDHNQNGNLD

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8064\\_f08.zip](https://cdn.origene.com/chromatograms/mk8064_f08.zip)

**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



ACCN: NM\_001165975

ORF Size: 1548 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\\_001165975.3](#)

RefSeq ORF: 1551 bp

Locus ID: 5153

UniProt ID: [Q01064](#)

Cytogenetics: 12q13.2

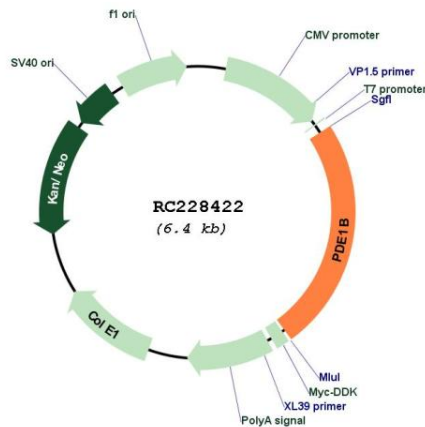
Protein Families: Druggable Genome

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

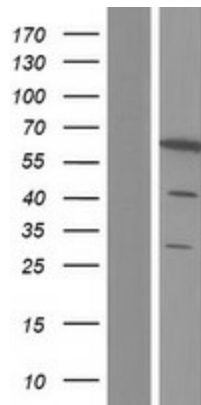
**MW:** 58.9 kDa

**Gene Summary:** The protein encoded by this gene belongs to the cyclic nucleotide phosphodiesterase (PDE) family, and PDE1 subfamily. Members of the PDE1 family are calmodulin-dependent PDEs that are stimulated by a calcium-calmodulin complex. This PDE has dual-specificity for the second messengers, cAMP and cGMP, with a preference for cGMP as a substrate. cAMP and cGMP function as key regulators of many important physiological processes. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Jul 2011]

**Product images:**



Circular map for RC228422



Western blot validation of overexpression lysate (Cat# [LY431450]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC228422 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).