

Product datasheet for **RC238596**

PDE4 (PDE4B) (NM_001297442) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDE4 (PDE4B) (NM_001297442) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PDE4B
Synonyms:	DPDE4; PDEIVB
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide Sequence:

>RC238596 representing NM_001297442
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCTGAGGCAAATTATTTGTTATCTGTATCTTGGGGTTACATCAAGTTCAAAAGAATGCTGAACCGGG
 AGCTGACACACCTCTCAGAGATGAGCCGATCAGGGAACAGGTGTCTGAATACATTTCAAATACTTTCTT
 AGACAAGCAGAATGATGTGGAGATCCCATCTCCTACCCAGAAAGACAGGGAGAAAAAGAAAAAGCAGCAG
 CTCATGACCCAGATAAGTGGAGTGAAGAAATTAATGCATAGTTCAAGCCTAAACAATACAAGCATCTCAC
 GCTTTGGAGTCAACACTGAAAAAAGAATCACCTGGCCAAAGGAGCTGGAAGACCTGAACAATGGGGTCT
 TAACATCTTTAATGTGGCTGGATATTCTACAATAGACCCTAACATGCATCATGTATGCTATATTCCAG
 GAAAGAGACCTCCTAAAGACATTCAGAATCTCATCTGACACATTTATAACCTACATGACTTTAGAAG
 ACCATTACCATTCTGACGTGGCATTACACAACAGCCTGCACGCTGCTGATGTAGCCAGTCGACCCATGT
 TCTCCTTTCTACACCAGCATTAGACGCTGTCTTACAGATTTGGAGATCCTGGCTGCCATTTTTGCAGCT
 GCCATCCATGACGTTGATCATCCTGGAGTCTCCAATCAGTTTCTCATCAACACAAATTCAGAACTTGCTT
 TGATGTATAATGATGAATCTGTGTTGGAAAATCATCACCTTGCTGTGGGTTTCAAAGTGTGCAAGAAGA
 AACTGTGACATCTTCAATCTCACCAGAAGCAGCGTCAGACACTCAGGAAGATGGTTATTGACATG
 GTGTTAGCAACTGATATGTCTAAACATATGAGCCTGCTGGCAGACCTGAAGACAAATGGTAGAAACGAAGA
 AAGTTACAAGTTCAGGCGTTCTTCTCCTAGACAACTATACCGATCGCATTAGGTCTTCGCAACATGGT
 AACTGTGACAGCTGAGCAACCCACCAAGTCTTGGAAATGTATCGGCAATGGACAGACCGCATCATG
 GAGGAATTTTCCAGCAGGGAGACAAAGAGCGGGAGAGGGGAATGGAAATAGCCCAATGTGTGATAAAC
 ACACAGCTTCTGTGAAAAATCCAGTTGGTTTCATCGACTACATTGTCCATCCATTTGGGGAGACATG
 GGCAGATTTGGTACAGCCTGATGCTCAGGACATTTCTCGATACCTTAGAAGATAACAGGAACCTGGTATCAG
 AGCATGATACCTCAAAGTCCCTCACCACACTGGACGAGCAGAACAGGGACTGCCAGGGTCTGATGGAGA
 AGTTTCAGTTTGAAGTACTCTCGATGAGGAAGATTCTGAAGGACCTGAGAAGGAGGGAGAGGGACACAG
 CTATTTACAGCAGCACAAGACGCTTTGTGTGATTGATCCAGAAAACAGAGATTCCCTGGGAGAGACTGAC
 ATAGACATTGCAACAGAAGACAAGTCCCCCGTGGATACA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC238596 representing NM_001297442
 Red=Cloning site Green=Tags(s)

MPEANYLLSVSWGVIKFKRMLNRELTHLSEMSRSGNQVSEYISNTFLDKQNDVEIPSPTQKDREKKKKQQ
 LMTQISGVKMLMHSSSLNNTSISRFGVNTENEDHLAKELEDLNKWLNIQVAGYSHNRPLTCIMYAIQ
 ERDLLKTRFISSDTFITYMMTLEDHYHSDVAYHNSLHAADVAQSTHVLLSTPALDAVFTDLEILAAIFAA
 AIHVDVHPGVSNQFLINTNSELALMYNDESVLENHHLAVGFKLLQEEHCDIFMNLTKKQRQTLRKMVIDM
 VLATDMSKHMSLLADLKTMTVETKKTSSGVLLLDNYTDRIQVLRNMVHCADLSNPTKSLELYRQWTDRI
 EEFFQQGDKERERGMESPMCDKHTASVEKSVQVGFIDYIVHPLWETWADLVQPDQILDLEDRNRYQ
 SMIPQSPSPPLDEQNRDCQGLMEKFQFELTLDEEDSEGPEKEGEGHSYFSSKTKLCVIDPENRDSLGETD
 IDIATEDKSPVDT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

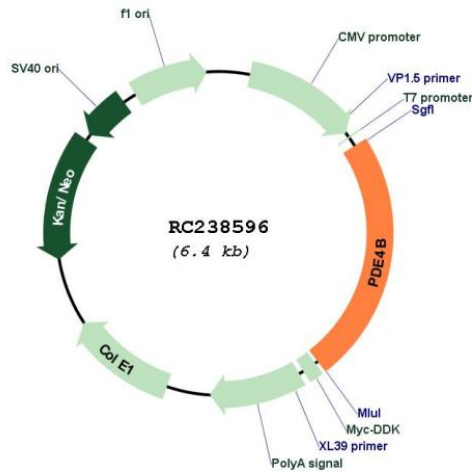
Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001297442

ORF Size: 1509 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_001297442.2](#)

RefSeq Size: 3888 bp

RefSeq ORF: 1512 bp

Locus ID: 5142

UniProt ID: [Q07343](#)

Cytogenetics: 1p31.3

Protein Families: Druggable Genome

Protein Pathways: Progesterone-mediated oocyte maturation, Purine metabolism

MW: 58.2 kDa

Gene Summary: This gene is a member of the type IV, cyclic AMP (cAMP)-specific, cyclic nucleotide phosphodiesterase (PDE) family. The encoded protein regulates the cellular concentrations of cyclic nucleotides and thereby play a role in signal transduction. Altered activity of this protein has been associated with schizophrenia and bipolar affective disorder. Alternative splicing and the use of alternative promoters results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2014]