

Product datasheet for **SC106296**

PDE4 (PDE4B) (NM_002600) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDE4 (PDE4B) (NM_002600) Human Untagged Clone
Tag:	Tag Free
Symbol:	PDE4
Synonyms:	DPDE4; PDEIVB
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC106296 sequence for NM_002600 edited (data generated by NextGen Sequencing)

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ATGAAGAAAAGCAGGAGTGTGATGACGGTGATGGCTGATGATAATGTAAAGATTATTTT
GAATGTAGCTTGAGTAAATCCTACAGTTCTTCCAGTAACACACTTGGGATCGACCTCTGG
AGAGGGAGAAGGTGTTGCTCAGGAACTTACAGTTACCACCACTGTCTCAAAGACAGAGT
GAAAGGGCAAGGACTCCTGAGGGAGATGGTATTTCCAGGCCGACCACACTGCCTTTGACA
ACGCTTCCAAGCATTGCTATTACAACCTGTAAAGCCAGGAGTGCCTTTGATGTGAAAAATGGC
CCTTCCCCAGGTCGGAGTCCACTGGATCCCCAGGCCAGCTCTTCCGCTGGGCTGGTACTT
CACGCCACCTTTCTGGGCACAGCCAGCCAGAGAGTCAATTTCTACAGATCAGACAGC
GACTATGACTTGTACCAAAGGCGATGTCGAGAACTCTTCTCTTCCAAGCGAGCAACAC
GGCGATGACTTGATTGTAACCTCTTTTGCCAGGTCCTTGCCAGCTTGCGAAGTGTGAGA
AACAACTCACTATACTGACAAACCTTCATGGTACATCTAACAAAGAGTCCCCAGCTGCT
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AATAGACCCCTAACATGCATCATGTATGCTATATCCAGGAAAGAGACCTCCTAAAGACA
TTCAGAATCTCATCTGACACATTTATAACCTACATGATGACTTTAGAAGACCATTACCAT
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TCAGGCGTTCTTCTCCTAGACAACCTATACCGATCGCATTGAGTCTTTCGCAACATGGTA
CACTGTGCAGACCTGAGCAACCCACCAAGTCTTGGAAATGTATCGGCAATGGACAGAC
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TACATTGTCCATCCATTGTTGGGAGACATGGGCAGATTTGGTACAGCCTGATGCTCAGGAC
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TCACCACCACTGGACGAGCAGAACAGGGACTGCCAGGGTCTGATGGAGAAGTTTCAGTTT
GAACTGACTCTCGATGAGGAAGATTCTGAAGGACCTGAGAAGGAGGGAGAGGGACACAGC
TATTTTCAGCAGCACAAAGACGCTTTGTGTGATTGATCCAGAAAACAGAGATTCCTGGGA
GAGACTGACATAGACATTGCAACAGAAGACAAGTCCCCCGTGGATACATAA

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Clone variation with respect to NM_002600.3

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_002600 unedited
 TCAGCAATTTGTAATACGACCTCACTATAGGGCGGCCGGAATTCGCACGAGGAAAAATG
 TCAGCAAAGTGCATTGAATAACAGACATCCTAAGAGGGGATATTTCCACCTCTATAATG
 AAGAAAAGCAGGAGTGTGATGACGGTGTGGCTGATGATAATGTTAAAGATTATTTTGAA
 TGTAGCTTGAGTAAATCCTACAGTTCTTCCAGTAACACACTTGGGATCGACCTCTGGAGA
 GGGAGAAGGTGTTGCTCAGGAACTTACAGTTACCACCACTGTCTCAAAGACAGAGTGAA
 AGGGCAAGGACTCCTGAGGGAGATGGTATTTCCAGGCCGACCACACTGCCTTTGACAACG
 CTTCCAAAGCATTGCTATTACAACGTAAAGCCAGGAGTGCTTTGATGTGGAAAATGGCCCT
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 TATGACTTGTCCAAAGGCGATGTCGAGAACTTCTCTTCCAAGCGAGCAACACGGC
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 AACTTCACTATACTGACAACTTCATGGTACATCTAACAAGAGGTCCCCAGCTGCTAGT
 CAGCCTCTGTCTCCAGAGTCAACCCACAAGAAAATCTTATCAAAAATTAGCAATGGAAA
 CGCTGGAGGAATTAGACTGGGTGTAGACCAGCTAGAGACCATACAGACCTACCCGCTCTG
 TCAGTGAGATGGCTTCTAAACAGNTCAAAGAATGCTGAACCGGNAGCTGACACCCCTCA
 AAGAGAGCCGATCAGGNAACCAGTGTCTGATACT

3' Read Nucleotide Sequence:

>OriGene 3' genomic read for NM_002600 unedited
 NNNNCCCTACTGTGNNACCGGCCCTTATNCNANGATCGNATTTTTTTTTTTTTTTTTTTT
 TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTAAACATGCTTTTCTTTATTCACCTCATAAAA
 AAGTCTCTTTAGAATGCATTTGAACACAATATATAATAATAACTATAACATACATTGG
 GAGAAACATTTGAAAATGATAAAATGTCCACCTGAAACAATGCAGTGTTCAAAAACATAC
 ATGGTCAATGCACATTTGTGCCATTTCTGTAATTACTGAGTCACAATGCTGAACTGAAA
 GCATGAAACATATTTACAACTGAACTGACATCAGTAAAAGGCCTAACAAAGTGTATC
 AAAAAAGGCTTCACATTTGCGTAATTTGCTACATCAGTTCACATTTTATTATAAAAATTC
 ACATTTGGTTTATTGGTTTCTTTTGGAAAGAACTGGAACATGACATTCCTGCTTAATGGCA
 GGCAGGAGGCTACCTCTCAAAGTCAGTAGTTCGGGAGCATTCAAAAAATCATCTGTGA
 CCAATGTAGTGTTCCTTTTGAACCAAGCCACAATGATAGTAGGATCCAGTTATAACC
 CAACTCATGCCACATAAATTTGGATAGAACCTGGGTAAAACTACATCCCATTTGCCCC
 TGCCCTATCAAGCTTTACAAAAGTAAAAGCTCAGTATAAAACATTTAGTATCTAAGGTG
 AGAATATTGTTTCCAAAAGTGGTTCATAAAGGGGGTGGGCAAAAATAGCAACTCAGGCAC
 GGAAAGGGCAGACCCCTTTGAACAAAGCCCCCTGTTCTTTCTGGCAAGGGGGCCTATG
 TCCTTTCCCTAAGGACGTTGGGGTAAATAAAN

Restriction Sites:

NotI-NotI

ACCN:

NM_002600

Insert Size:

4700 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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:	<ol style="list-style-type: none">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_002600.3 , NP_002591.2
RefSeq Size:	4264 bp
RefSeq ORF:	2211 bp
Locus ID:	5142
UniProt ID:	Q07343
Cytogenetics:	1p31.3
Domains:	PDEase
Protein Families:	Druggable Genome
Protein Pathways:	Progesterone-mediated oocyte maturation, Purine metabolism
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (a) encodes the longest isoform (1, also referred to as PDE4B1 or Tm72). Both variants a and d encode the same isoform.</p>