

Product datasheet for **SC318999**

PDE4A (NM_001111307) Human Untagged Clone

Product data:

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|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | PDE4A (NM_001111307) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | PDE4A |
| Synonyms: | DPDE2; PDE4; PDE46 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



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Fully Sequenced ORF: >SC318999 representing NM_001111307.
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGAACCCCGACCGTCCCCTCGAAAAGGAGCCTGTCTGTCACTGCCCGGGCCCCGGGAGGGCCAG
GCCACCCGTAAGCCTCCCCGAGCACCTGTGGCGGCAGCCTCGACCCCATCCGTATCCAGCAGCGC
GGCTACTCCGACAGCGCGGAGCGCGCCGAGCGGGAGCGGCAGCCGACCCGCCATAGAGCGCGCCGAT
GCCATGGACACCAGCGACCGGCCCGGCCTGCGCACGACCCGCATGTCTGGCCCTCGTCTTCCATGGC
ACTGGCACCGGCAGCGCGCGGGCGGAGGCAGCAGCAGCGCTTCGAGGCAGAGAATGGGCCGACA
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CGGTCCCCTGTTGGCGGCCACCCCTGTCTGCAAGGCCAGCTGTGAGAAGAACTGTGACGAGTTG
GCCCGGGAGACTCTGGAGGAGCTGGACTGGTGTCTGGAGCAGCTGGAGACCATGCAGACCTATCGTCT
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CTGGCCGTGGGCTTCAAGCTGCTGCAGGAGGACAACTGCGACATCTTCCAGAACCTCAGCAAGCGCCAG
CGGCAGAGCCTACGCAAGATGGTCATCGACATGGTGTGGCCACGGACATGTCCAAGCACATGACCCCTC
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CACCAGGCTGCCAAGAGGGCTTGCAGTGCCTGCGCAGGGACATTTGGGGAGGACACATCCGCACTCCCA
GCTCTGGTGGCGGGGGTCAAGTGGAGACCCTACTGA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTAAACGGCCGGC
  
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Restriction Sites: Sgfl-Mlul
Plasmid Map: □
ACCN: NM_001111307

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| Insert Size: | 2661 bp |
| OTI Disclaimer: | <p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p> |
| OTI Annotation: | This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA. |
| 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_001111307.1 |
| RefSeq Size: | 4794 bp |
| RefSeq ORF: | 2661 bp |
| Locus ID: | 5141 |
| UniProt ID: | P27815 |
| Cytogenetics: | 19p13.2 |
| Protein Families: | Druggable Genome |
| Protein Pathways: | Progesterone-mediated oocyte maturation, Purine metabolism |
| MW: | 98.1 kDa |

Gene Summary:

The protein encoded by this gene belongs to the cyclic nucleotide phosphodiesterase (PDE) family, and PDE4 subfamily. This PDE hydrolyzes the second messenger, cAMP, which is a regulator and mediator of a number of cellular responses to extracellular signals. Thus, by regulating the cellular concentration of cAMP, this protein plays a key role in many important physiological processes. Alternatively spliced transcript variants encoding different isoforms have been described for this gene.[provided by RefSeq, Jul 2011]

Transcript Variant: This variant (1) encodes the longest isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of this transcript is supported by transcript alignments.