

Product datasheet for **SC123995**

PDE5A (NM_001083) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDE5A (NM_001083) Human Untagged Clone
Tag:	Tag Free
Symbol:	PDE5A
Synonyms:	CGB-PDE; CN5A; PDE5
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC123995 sequence for NM_001083 edited (data generated by NextGen Sequencing)

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ATGGAGCGGGCCGGCCCCAGCTTCGGGCAGCAGCGACAGCAGCAGCAGCCCCAGCAGCAG
AAGCAGCAGCAGAGGGATCAGGACTCGGTCAAGCATGGCTGGACGATCACTGGGACTTT
ACCTTCTCATACTTTGTTAGAAAAGCCACCAGAGAAATGGTCAATGCATGGTTTGCTGAG
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TTTGATCATGATGAAGGGGACCAGTGCTCAAGACTCTTGGAAATTAGTGAAGGATATTTCT
AGTCATTTGGATGTCACAGCCTTATGTCACAAAATTTTCTTGATATCCATGGACTGATA
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ATCAGCCGCTCTTTGATGTTGCTGAAGGTTCAACACTGGAAGAAGTTTCAAATAACTGT
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CCTTTGCTAGATGGCTGCAGAAAGAACAGGCAGAAATGGCAGGCCCTTGCAACAGCAG
GAGAAGATGCTGATTAATGGGAAAGCGGCCAGGCCAAGCGGAACTGA

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Clone variation with respect to NM_001083.3
 278 c=>t;1242 t=>y

5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_001083 unedited ACGAAGACTATAGGGCGGCCGGAATTCGGCACGAGGCAGGACGAAGGGGGAGGGTCTCG AGGCCGAGTCCTGTTCTTCTGAGGGACGGACCCAGCTGGGGTGGAAAAGCAGTACCAGA GAGCCTCCGAGGCGCGCGGTGCCAACCATGGAGCGGGCCGGCCAGCTTCGGGCAGCAG CGACAGCAGCAGCCCCAGCAGCAGAAGCAGCAGCAGAGGGATCAGGACTCGGTGAA GCATGGCTGGACGATCACTGGGACTTTACCTTCTCATACTTTGTTAGAAAAGCCACCAGA GAAATGGTCAATGCATGGTTTGTGAGAGAGTTCACACCATCCCTGTGTGCAAGGAAGGT ATCAGAGGCCACACCGAATCTTGCTCTTGCCCTTGACAGCAGAGTCTCGTGCAGATAAC AGTGTCCCTGGAACACCAACCAGGAAAATCTCTGCCTCTGAATTTGACCGCCTCTTAGA CCCATTGTTGTCAAGGATTCTGAGGGAAGTGTGAGCTTCTCTCTGACTCAGAAAAGAAG GAACAGATGCCTTAACCCCTCAAGGTTTGTATCATGATGAAGGGGACCAGTGCTCAAGA CTCTTGGAAATTAGTGAAGGATATTTCTAGTCATTTGGATGTCACAGCCTTATGTCACAAA ATTTTCTGCATATCCATGGACTGATATCTGCTGACCGCTATTCCTGGTTCTTGTCTGT GAAACAGCTCCATGACAGTT</p>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_001083 unedited TCCGAGCCAGGAGAGGCACTGGGGAGGGGTACAGGGATGCCACCCGGGATCTGTTCCAGG AAACAGCTATGACCGCGGCCGAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTTTT TTTTTTTTTTTTTTTTTTTTTTTTTTTTACCTGAACAATCTTTTTATTTTACAAAGCCTG GAAAAATGGGAAACCCCTGGCCGGGAAAAATTTGCCCAATGGAAAACCCCTTGACCA TTTTCATGACTTTTTACAGGAATCGGAGGGAAGTTCCTTTAAAGGGATTTTGTTCATGAA AAAGTCATCTGAAATGACTCTCGTGATGGGGGAAAGGAAAGTAATGAAATCAACCTTCAT GGTATTTAAAAATGCCTTAAAAGCTAAGCCTAATATACATAGTAAACCCCTTTTCCAGTA TAAAAATAGTGCCAGAACTATTTTTGTTCAAATTTTTGAAAAGGTTTAAAGATCCCAA TTGTTTTTAAACCGTGGCTAGTGATGCCTCATAAGGTTTTCTTAACTGGAATATAAATTT ATATTTTCAACTATTTACATTGCTTTCAACAACCTTCATTAACATGTTTACACAGGCT TTTATAAGTATATGGAATGGAAGGGGCTTTATACTTTTTCTTCTCTGTGTTAACAG AGGGGCCAAACCTGCCATTTACAGTCCAAAAACTGGTATTTTACTGGTTGAATGG</p>
Restriction Sites:	NotI-NotI
ACCN:	NM_001083
Insert Size:	8000 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>
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_001083.3 , NP_001074.2
RefSeq Size:	7005 bp
RefSeq ORF:	2628 bp
Locus ID:	8654
UniProt ID:	O76074
Cytogenetics:	4q26
Domains:	PDEase, GAF, HDc
Protein Families:	Druggable Genome
Protein Pathways:	Progesterone-mediated oocyte maturation, Purine metabolism
Gene Summary:	<p>This gene encodes a cGMP-binding, cGMP-specific phosphodiesterase, a member of the cyclic nucleotide phosphodiesterase family. This phosphodiesterase specifically hydrolyzes cGMP to 5'-GMP. It is involved in the regulation of intracellular concentrations of cyclic nucleotides and is important for smooth muscle relaxation in the cardiovascular system. Alternative splicing of this gene results in three transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1, also known as PDE5A1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>