

Product datasheet for **RC216759**

PDE5A (NM_033437) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDE5A (NM_033437) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PDE5A
Synonyms:	CGB-PDE; CN5A; PDE5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC216759 representing NM_033437
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGTCAATGCATGGTTTGTGAGAGAGTTCACACCATCCCTGTGTGCAAGGAAGGTATCAGAGGCCACA
 CCGAATCTTGCTCTTGCCCTTGACAGCAGAGTCCCTCGTGAGATAACAGTGCCCCCTGGAACACCAACCAG
 GAAAATCTCTGCCTCTGAATTTGACCGGCTCTTAGACCCATTGTTGTCAAGGATTCTGAGGAACTGTG
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 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC216759 representing NM_033437
 Red=Cloning site Green=Tags(s)

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MVNAWFAERVHTIPVCKEGRGHTESCSCPLQQSPRADNSAPGTPTRKISASEFDRPLRPPIVVKDSEGTV
SFLSDSEKKEQMPLTPPRFDHDEGDQCSRLLELVKDISSHLDVLTALCHKIFLHIHGLISADRYSLFLVCE
DSSNDKFLISRFLDVAEGSTLEEVSNNCIRLEWNKGIVGHVAALGEPLNIKDAYEDPRFNAEVDQITGYK
TQSILCMPIKNHREEVGVQAQAINKKSGNGGTFTEKDEKFAAYLAFCGIVLHNAQLYETSLLLENKRNV
LLDLASLIFEEQQSLEVILKKAATIIISFMQVQKCTIFIVDEDCSDSFSSVFHMECEELEKSSDTLTREH
DANKINYMYAQYVKNTEPLNIPDVSKDKRFPWTTENTGNVNQQCIRSLCTPIKNGKKNKVIQVQQLVN
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ELFLAMLMTACDLSAITKPWPIQQRIAEVATEFFDQGDREKELNIEPTDLMNREKKNKIPSMQVGFID
AICLQLYEALTHVSEDCFPLLDGCGRNRQKQWQALAEQQEKMLINGESGQAKRN
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TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM_033437

ORF Size: 2469 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_033437.3](#), [NP_246273.2](#)

RefSeq Size: 6788 bp

RefSeq ORF: 2472 bp

Locus ID: 8654

UniProt ID: [O76074](#)

Cytogenetics: 4q26

Domains: PDEase, GAF

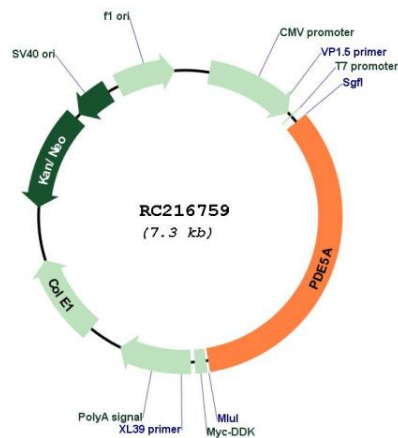
Protein Families: Druggable Genome

Protein Pathways: Progesterone-mediated oocyte maturation, Purine metabolism

MW: 93.6 kDa

Gene Summary: 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]

Product images:



Circular map for RC216759