

Product datasheet for **RC228618**

PDE2A (NM_001146209) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDE2A (NM_001146209) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PDE2A
Synonyms:	CGS-PDE; cGSPDE; PDE2A1; PED2A4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC228618 representing NM_001146209
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAAGAAACAGAGGATCCAGGAGGGGAAATCGCTTGCCACAGGCGGGCCAGCAGGTCTTCTCAAGC
 CGGACGAGCCGCCCGCCGCGCCGAGCCATGCGCCGACAGCCTGCAGGACGCCTTGCTGAGTCTGGGCTC
 TGTTCATCGACATTTAGGCCTGCAACGTGCTGTCAAGGAGGCCCTGTGAGCTGTGCTCCCCGAGTGAA
 ACTGTCTACACCTACCTACTGGATGGTGTGAGTCCCAGTGGTGTGTGAGGACCCCCACATGAGCTGCCCC
 AGGAGGGGAAAGTCCGGGAGGCTATCATCTCCAGAAGCGGTGGGCTGCAATGGGCTGGGCTTCTCAGA
 CCTGCCAGGGAAGCCCTTGGCCAGGCTGGTGGCTCCACTGGTCTGATACCCAAGTGTGGTATGATGCCG
 CTAGCGGACAAGGAGGCTGGGGCCGTGGCAGTGTGATCTTGGTGCAGTGTGGCCAGTGTGATGATAATG
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 GCGCGGGCCAGGAGGCTCCCCGAGCCGTCCAGAACCCCCGAGGGGACGGCGGAAGACCAGAAGGGC
 GGGGCGCGGTACACCGACCGCGACCGCAAGATCCTCCAACGTGTCGGGGAACTCTACGACCTGGATGCC
 TTTCCCTGCAGCTCAAAGTGTCCAATACCTGCAGCAGGAGACCCGGGCATCCCGCTGTGCCTCTGTCT
 GGTGTGCGGAGGACAATCTCCAGCTTTCTTGAAGGTGATCGGAGACAAAGTGTCTCGGGAAAGAGGTGAGC
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 CCGAGGATGTACAACAGTGCAGAGCATGTTGGGCTGTGAGTGCAGGCCATGCTCTGTGCTCCCTGTGAT
 CAGCCGGGCCACTGACAGGTGGTGGCTTGGCTGCGCCTTCAACAAGCTAGAAGGAGACTTGTTCACC
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 CATGGCCATCCTGAGCATGCTGCAGGACATGAATTTATCAACAACCTACAAAATTGACTGCCCGACCTG
 GCCCGGTTCTGTTTATGGTGAAGAAGGGCTACCGGGATCCCCCTACCAACTGGATGCACGCTTTT
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 TACGAGGTGCCTGATCTGGATGGCACTAGGGCCCCATCAATGGTGTCTGCAGCCTTGTGCTGAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATGAGTTTAA

Protein Sequence: >RC228618 representing NM_001146209
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MKKQRIQEGKSLAHRGQVFLKPDEPPPPPPPCADSLQDALLSLGSVIDISGLQRAVKEALSAVLPRVE
 TVYTYLLDGE SQLVCEDPPHEL PQEGKVREAIISQKRLGCNGLGFSDLPGKPLARLVAPLAPDTQVLMVP
 LADKEAGAAVAAILVHCGQLSDNEEWSLQAVEKHTLVALRRVQVLQQRGPREAPRAVQNPPEGTAEDQKG
 GAAYTDRDRKILQLCGELYDL DASSLQLKVLQYLQQETRASRCCLLLVSEDNLQLSCKVIGDKVLGEEVS
 FPLTGCLGQVVEDKKSILKDLTSEDEVQLQSM LGCELQAML CVPVISRATDQVVALACAFNKLEGLFT
 DEDEHVIQHC FHYSTVLTSTLAFQKEQKLKCECQALLQVAKNLFTHLDDVSVLLQEITTEARNLSNAEI
 CSVFLLDQNELVAKVFDGGVDDDES YEIRIPADQGIAGHVATTGQILNIPDAYAHPLFYRGVDDSTGFRT
 RNILCFPIKNNQEVIGVAELVNKINGPWF SKFDEDLATAFSIYCGISIAHSLLYKVNQAQYRSHLANE
 MMMYHMKVSDDEYTKLLHDGIQPVAAIDSNFASFYTPRSLPEDDTSMAIL SMLQDMNF INNYKIDCPTL
 ARFCLMVKKGYRDPYPYHNMWHA FSVSHFCYLL YKNELE TNYLEDIEIFALFISCMCHDLDRGTNNSFQV
 ASKSVLAALYSSEGSVMERHHFAQAIAILNTHGCNIFDHF SRKDYQRMLDLMRDII LATDLAHLHRI FKD
 LQKMAEVGYDRNNKQHRRLLLCLLMTSCDLSDQTKGWKTRKIAELIYKEFFSQGDLEKAMGNRPMEMMD
 REKAYIPELQISFMEHIAMPIYKLLQDLFPKAEL YERVASNREHWTKVSHKFTIRGLPSNNSLDFLDEE
 YEVPDLDGTRAPINGCCSLDAE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

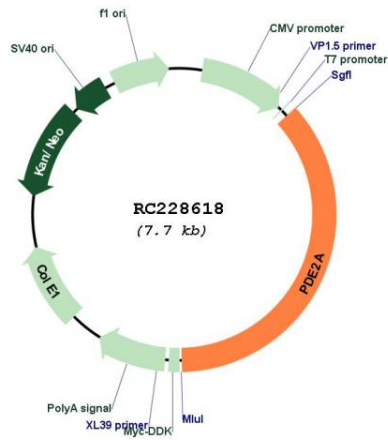


ACCN: NM_001146209

ORF Size: 2796 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:	<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_001146209.2 , NP_001139681.1
RefSeq Size:	4196 bp
RefSeq ORF:	2799 bp
Locus ID:	5138
UniProt ID:	O00408
Cytogenetics:	11q13.4
Protein Families:	Druggable Genome
Protein Pathways:	Progesterone-mediated oocyte maturation, Purine metabolism
MW:	105 kDa
Gene Summary:	Cyclic nucleotide phosphodiesterase with a dual-specificity for the second messengers cAMP and cGMP, which are key regulators of many important physiological processes. Plays an important role in growth and invasion of malignant melanoma cells (e.g. pseudomyxoma peritonei (PMP) cell line) (PubMed:24705027).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC228618