

Product datasheet for **RG205291**

PDE1C (NM_005020) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDE1C (NM_005020) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PDE1C
Synonyms:	cam-PDE 1C; DFNA74; hCam-3; Hcam3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG205291 representing NM_005020
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGTCGCCAACAAAGGAGATTGAAGAATTTGAGAGCAACTCTCTGAAATACCTGCAACCGGAACAGA
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 CAAAGATGGTAAAAATAAGACAGACAAGAAGGATCACTTAACATCGGAAATGATTCAAAGAAAACAGAT
 GATTCACAAGAG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG205291 representing NM_005020
 Red=Cloning site Green=Tags(s)

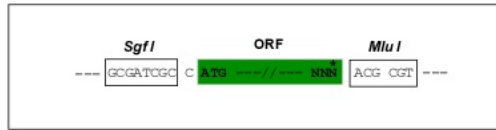
MESPTKEIEEFESNSLKYLPQEQIEKIWLRLRGLRKYKKSQRLRSLVKQLERGEASVVDLKKNLEYAAT
 VLESVYIDETRRLDTEDELSDIQSDAVPSEVRDWLASTFTRQMGMLRRSDEKPRFKSIVHAVQAGIFV
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 SAPINNSVISVDYKSFKATWTEVVHINRERWRAKVPKEEKAKKEAEEKARMAAEEQQKEMEAKSQAEEGA
 SGKAEKKTSGETKNQVNGTRANKSDNPRGKNSKAEKSSGEQQQNGDFKDGKNKTDKDKHNSIGNDSKKT
 DSQE

TRTRPLE – GFP Tag – V

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM_005020

ORF Size: 1902 bp

OTI Disclaimer: 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.

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_005020.1](#), [NP_005011.1](#)

RefSeq Size: 2694 bp

RefSeq ORF: 1905 bp

Locus ID: 5137

UniProt ID: [Q14123](#)

Cytogenetics: 7p14.3

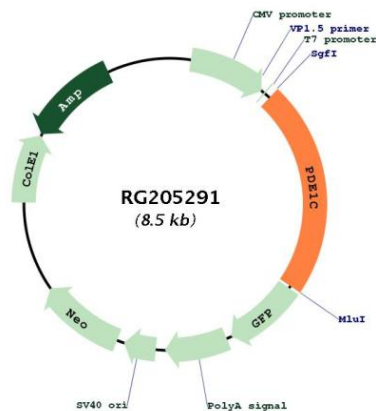
Domains: PDEase, HDc

Protein Families: Druggable Genome

Protein Pathways: Calcium signaling pathway, Olfactory transduction, Progesterone-mediated oocyte maturation, Purine metabolism

Gene Summary: This gene encodes an enzyme that belongs to the 3'5'-cyclic nucleotide phosphodiesterase family. Members of this family catalyze hydrolysis of the cyclic nucleotides, cyclic adenosine monophosphate and cyclic guanosine monophosphate, to the corresponding nucleoside 5'-monophosphates. The enzyme encoded by this gene regulates proliferation and migration of vascular smooth muscle cells, and neointimal hyperplasia. This enzyme also plays a role in pathological vascular remodeling by regulating the stability of growth factor receptors, such as PDGF-receptor-beta. [provided by RefSeq, Jul 2016]

Product images:



Circular map for RG205291