

Product datasheet for **RC226169**

PDE10A (NM_001130690) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDE10A (NM_001130690) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PDE10A
Synonyms:	ADSD2; HSPDE10A; IOLOD; LINC00473; PDE10A19
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC226169 representing NM_001130690
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAAGATGGACCTTCTAATAATGCGAGCTGCTTCCGAAGGCTGACCGAGTGCTTCTGAGCCCCAGTT
 TGACAGATGAAAAAGTGAAGGCATATCTTCTCTTCAACCCAGGTATTAGATGAATTTGTATCTGAAAG
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 CTGAACATTCAGATGCCTATGCAGACCCACGCTTAAACAGAGAAGTAGACTTGTACACAGGCTACACCA
 CGCGGAACATCCTGTGCATGCCATCGTCAGCCGAGGCAGCGTGATAGGTGTGGTGCAGATGGTCAACAA
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 CTCTACTCCACTTCCACCATGGAGCAGCACCCTTCTCCAGACTGTGTCCATCCTCCAGTTGGAAGG
 GCACAATATCTTCTCACTCTGAGCTCCAGTGAATATGAGCAGGTGCTTGAGATCATCCGAAAGCCATC
 ATTGCCACAGACCTTGCTTTATACTTTGAAAACAGGAAGCAGTTGGAAGAGATGTACCAGACCGGATCAC
 TAAACCTTAATAATCAATCACATAGAGACCGTGAATTGGTTTGTATGACTGCCTGTGACCTTTGTTC
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 GATGAAATGAAGAAATGGGAATACAGCCTATTCCTATGATGGACAGAGACAAGAAGGATGAAGTCCCC
 AAGGCCAGCTTGGGTTCTACAATGCCGTGGCCATTCCCTGCTATACAACCTTACCCAGATCCTCCCTCC
 CACGGAGCCTCTTCTGAAAGCATGCAGGGATAATCTCAGTCAGTGGGAGAAGGTGATTCGAGGGGAGGAG
 ACTGCAACCTGGATTTTATCCCCATCCGTGGCTCAGAAGGCAGCTGCATCTGAAGAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC226169 representing NM_001130690
Red=Cloning site Green=Tags(s)

MEDGPSNNASCFRRLTECFLSPSLTDEKVKAYLSLHPQVLDEFVSESVSAETVEKWLKRKNNKSEDESAP
KEYSRYQDTNMQGVVYELNSYIEQRLDTGGDNQLLLYELSSIIKIATKADGFALYFLGECNNSLCIFTPP
GIKEGKPRILIPAGPITQGTTVSAYVAKSRKTLLEDILGDERFPRGTGLESGTRIQSVLCLPIVTAIGDL
IGILELYRHWGKEAFCLSHQEVATANLAWASVAIHQVQVCRGLAKQTELNDFLLDVSKTYFDNIVAIDSL
LEHIMIYAKNLVNADRCALFQVDHKNKELYSDLFDIGEEKEGKPVFKKTKAIRFSIEKGIAGQVARTGEV
LNIPDAYADPRFNREVDLYTGYTTRNILCMPIVSRGSGVIGVVQMVNKGSGSAFSKTDENNFKMFVAVFCAL
ALHCANMYHRIRHSECIYRVTEKLSYHSICTSEEWQGLMQFTLPVRLCKEIELFHFDIGPFENMWPGIF
VYMVHRSCGTSCFELEKLCRFIMSVKKNYRRVPYHNWKHAVTVAHCMYAILQNNHTLFTDLERKGLLIAC
LCHDLDRHGFNSYQLKFDHPLAALYSTSTMEQHHSQTVSILQLEGHNIFSTLSSEYEQVLEIIRKAI
IATDLALYFGNRKQLEEMYQTGSLNLNQSHRDRVIGLMMTACDLCSVTKLWPVTKLTANDIYAEFWAEG
DEMKKLGIQPIPMMDRDKKDEVPQQLGFYNAVAIPCYTTLTQILPPTPELLKACRDNLQWEKVIIRGEE
TATWISSPSVAQKAAASED

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja2653_f08.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



ACCN: NM_001130690

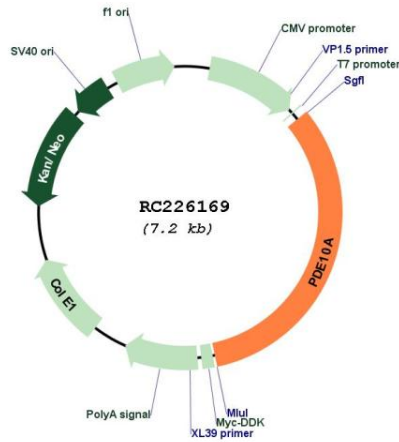
ORF Size: 2367 bp

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.

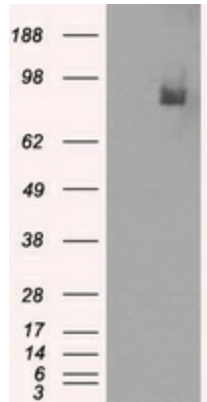
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<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_001130690.3
RefSeq Size:	8207 bp
RefSeq ORF:	2370 bp
Locus ID:	10846
UniProt ID:	Q9Y233
Cytogenetics:	6q27
Protein Families:	Druggable Genome
Protein Pathways:	Progesterone-mediated oocyte maturation, Purine metabolism
MW:	89.8 kDa
Gene Summary:	The protein encoded by this gene belongs to the cyclic nucleotide phosphodiesterase family. It plays a role in signal transduction by regulating the intracellular concentration of cyclic nucleotides. This protein can hydrolyze both cAMP and cGMP to the corresponding nucleoside 5' monophosphate, but has higher affinity for cAMP, and is more efficient with cAMP as substrate. Alternatively spliced transcript variants have been described for this gene. [provided by RefSeq, Dec 2011]

Product images:



Circular map for RC226169



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Lane 1), human PDE10A transcript variant 2 (Cat# [RC211181], Lane 2), human PDE10A transcript variant 1 (Cat# RC226169, Lane 3), and mouse PDE10A (Cat# [MR225520], Lane 4) cDNA clones for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PDE10A (Cat# [TA500625]).