

## Product datasheet for **RG234226**

### **PDE7A (NM\_001242318) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PDE7A (NM_001242318) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PDE7A
Synonyms:	HCP1; PDE7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG234226 representing NM\_001242318  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGAAGTGTGTTACCAGCTGCCGTAAGTCTGCCCTGGACAGGCCGGTCCCCAGCAGCTCCTCAGCCGCC  
 GAGGAGCCATCAGCTTCCAGCTCCAGCTCCGCTCTCTTCGCTGCCCAATCCCCGGCAGCTCTCAGAG  
 CGTGGAGCTATTTCTATGACAGTTCTGATCAGACTGCATTATACATTGATGCTAGGAGATGTACGT  
 GTAAGGAGCCGAGCAGGATTTGAATCAGAAAGAAGAGGTTCTCACCCATATATTGATTTTCGATTTTCC  
 ACTCTCAATCTGAAATTGAAGTGTCTGTCTCTGCAAGGAATATCAGAAGGCTACTAAGTTCCAGCGATA  
 TCTTAGATCTTACGCTTTTTTCGTTGACTGCGGTTTCAAATCCCTAAACATTTAGATGATGATTAT  
 AATGGACAAGCCAAGTGTATGCTGGAAAAAGTTGGAATTTGATATCTTTCTATTTGATAGAC  
 TAACAAATGGAATAGTCTAGTAAGCTTAACCTTTCAATTTAGTCTTCATGGATTAATTGAGTACTT  
 CCATTTAGATATGATGAACTTCGTAGATTTTTAGTTATGATTCAAGAAGATTACCACAGTCAAAATCCT  
 TACCATAACGCAGTCCACGCTGCGGATGTTACTCAGGCCATGCACTGTTACTTAAAGGAACCTAAGCTTG  
 CCAATCTGTAACCTCCTGGGATATCTTCTGAGCTTAATTGCAGCTGCCACTCATGATCTGGATCATCC  
 AGGTGTTAATCAACCTTTCTTATTAATAAACCATTACTTGGCACTTTATACAAGAATACCTCAGTA  
 CTGGAAAATCACCACTGGAGATCTGCAGTGGGCTTATTGAGAGAAATCAGGCTTATTCTCACATCTGCCAT  
 TAGAAAGCAGGCAACAAATGGAGACACAGATAGGTGCTCTGATACTAGCCACAGACATCAGTCGCCAGAA  
 TGAGTATCTGTCTTTGTTAGGTCCATTTGGATAGAGGTGATTTATGCCTAGAAGACACCAGACACAGA  
 CATTGGTTTTACAGATGGCTTTGAAATGTGCTGATTTTGTAAACCATGTCGGACGTGGGAATTAAGCA  
 AGCAGTGGAGTGAAAAAGTAACGGAGGAATCTTCCATCAAGGAGATATAGAAAAAATATCATTTTGG  
 TGTGAGTCCACTTTGCGATCGTCACACTGAATCTATTGCCAACATCCAGATTGGTTTTATGACTTACCTA  
 GTGGAGCCTTTATTTACAGAATGGGCCAGGTTTTCCAATACAAGGCTATCCCAGACAATGCTTGGACACG  
 TGGGGCTGAATAAAGCCAGCTGGAAGGGACTGCAGAGAGAACAGTCGAGCAGTGAGGACACTGATGCTGC  
 ATTTGAGTTGAACCTCACAGTTATTACCTCAGGAAAATCGGTTATCA

**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA**

**Protein Sequence:**

>RG234226 representing NM\_001242318  
 Red=Cloning site Green=Tags(s)

MEVCYQLPVLPLDRPVPQHVLRRGAI SFSSSSALFGCPNPRQLSQRGAI SYDSSDQTALYIRMLGDVR  
 VRSRAGFESERRGSHPYIDFRIFHSQSEIEVSVSARNIRRLSFQRYLRSSRFFRGTAVSNLNLDDDDY  
 NGQAKCMLEKVGNNWFDIFLFDRLTNGNSLVSLTFHLFSLHGLIEYFHLDMMKLRRFLVMIQEDYHSQNP  
 YHNAVHAADVQAMHCYLKEPKLANSVTPWDILLSLIAAATHDLDPGVNQPFLIKTNHYLATLYKNTSV  
 LENHHWRSVAVGLLRESGLFSLPLESRQMETQIGALILATDISRQNEYLSLFRSHLDRGDLCLEDTRHR  
 HLVLQMALKCADICNPCRTWELSKQWSEKVTVEFFHQGDIEKKYHLGVSPLCDRHTESIANIQIGFMTYL  
 VEPLFTEWARFSNTRLSQTMLGHVGLNKASWKGLQREQSSSEDTDAAFELNSQLLPQENRLS

**TRTRPLE - GFP Tag - V**

**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



ACCN: NM\_001242318

ORF Size: 1446 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\\_001242318.3](#)

RefSeq Size: 6641 bp

RefSeq ORF: 1449 bp

Locus ID: 5150

UniProt ID: [Q13946](#)

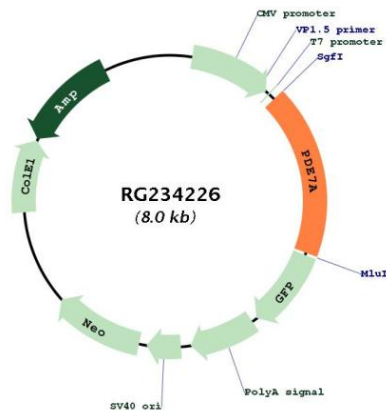
**Cytogenetics:** 8q13.1

**Protein Families:** Druggable Genome

**Protein Pathways:** Progesterone-mediated oocyte maturation, Purine metabolism

**Gene Summary:** The protein encoded by this gene belongs to the cyclic nucleotide phosphodiesterase (PDE) family, and PDE7 subfamily. This PDE hydrolyzes the second messenger, cAMP, which is a regulator and mediator of a number of cellular responses to extracellular signals. Thus, by regulating the cellular concentration of cAMP, this protein plays a key role in many important physiological processes. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Jul 2011]

**Product images:**



Circular map for RG234226