

## Product datasheet for **RG211181**

### **PDE10A (NM\_006661) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PDE10A (NM_006661) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PDE10A
Synonyms:	ADSD2; HSPDE10A; IOLOD; LINC00473; PDE10A19
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide  
Sequence:

>RG211181 representing NM\_006661  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGGATAGAAGAGAGGAAATCCCAACATTTAACAGTTTGACAGATGAAAAAGTGAAGGCATATCTTT  
CTTTACCCCCAGGTATTAGATGAATTTGTATCTGAAAGTGTTAGTGCAGAGACAGTAGAGAAATGGCT  
GAAGAGGAAGAACAACAATCAGAAGATGAATCAGCTCCTAAGGAAGTCAGCAGGTACCAAGATACGAAT  
ATGCAGGGAGTTGTATATGAACTAAACAGCTATATAGAACAACGGTTGGACACAGGAGAGACAACCAGC  
TACTCCTCTATGAACTGAGCAGCATCATAAAATAGCCACAAAAGCCGATGGATTGCACTGTATTTCT  
TGGAGAGTGAATAATAGCCTGTGTATATTCACGCCACCTGGGATAAAGGAAGGAAAACCCCGCCTCATC  
CCTGCTGGGCCCATCACTCAGGGCACCACCGTCTCTGCTTATGTGGCCAAGTCCAGGAAAACACTGCTAG  
TAGAAGACATCCTTGGAGATGAACGATTTCCAAGAGGACTGGACTGGAATCAGGGACTCGTATCCAGTC  
TGTTCTTTGCTTACCAATTGTCAGTCAATTTGGTACTTGATTGGTATTCTCGAGCTGTATCGGCCTGG  
GGCAAAGAAGCCTTCTGTCTTAGTACCAGGAGGTTGCAACAGCAAATCTGCGCTGGGCTTCAGTAGCAA  
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CTGGTGAATGCCGATCGTTGTGCACTTTCCAGGTGGACCATAAGAACAAGGAGTTATATTCAGACCTTT  
TTGATATTGGAGAGGAAAAGGAAGGAAAACCTGTCTTCAAGAAGACCAAGAGATAAGATTTTCAATTGA  
GAAAGGAATTGCTGGCCAAGTAGCAAGAACAGGGGAAGTCTGAACATCCAGATGCCTATGCAGACCCA  
CGCTTTAACAGAGAAGTAGACTTGTACACAGGCTACACCACGCGGAACATCCTGTGCATGCCATCGTCA  
GCCGAGGCAGCGTGATAGGTGTGGTGCAGATGGTCAACAAAATCAGTGGCAGTGCCTTCTTAAAAACAGA  
TGAAAACAACCTTCAAAATGTTTGCCGTCTTTTGTGCTTTAGCCTTACACTGTGCTAATATGTATCATAGA  
ATTCGCCACTCAGAGTGCATTTACCGGGTAACGATGAAAAGCTGTCTACCATAGCATTGTACTTCAG  
AAGAGTGGCAAGGTCTCATGCAATTCACCTTCCCGTGCCTCTGCAAAGAAATTGAATTATTCACCTT  
TGACATTGGTCTTTTGAACATGTGGCCTGGAATTTTGTCTACATGGTTCATCGGTCTGTGGGACA  
TCCTGCTTTGAGCTTGAAGGTTGTGTCGTTTTATTATGTCTGTGAAGAAGAACTATCGGCGGTTCTT  
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AGTAACAGCTACCTGCAGAAGTTCGACCACCTCTGGCCGCTCTACTCCACTTCCACCATGGAGCAGC  
ACCACTTCTCCAGACTGTGTCCATCCTCAGTTGGAAGGGCACAAATATCTTCTCCACTCTGAGCTCCAG  
TGAATATGAGCAGGTGCTTGAGATCATCCGCAAAGCCATCATTGCCACAGACCTTGCTTTATACTTTGGA  
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GACGGCAAATGATATATATGCAGAATTCGGGCTGAGGGTGTGAAATGAAGAAATTGGGAATACAGCCT  
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CCATTCCTGCTATACAACCTTACCCAGATCCTCCCTCCACGGAGCCTTCTGAAAGCATGCAGGGA  
TAATCTCAGTCAGTGGGAGAAGGTGATTGAGGGGAGGAGACTGCAACCTGGATTCATCCCCATCCGTG  
GCTCAGAAGGCAGCTGCATCTGAAGAT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG211181 representing NM\_006661  
Red=Cloning site Green=Tags(s)

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MRIEERKSQHLTGLTDEKVKAYLSLHPQVLDEFVSESVSAETVEKWLKRKNNKSEDESAPKEVSRVYQDTN
MQGVVYELNSYIEQRLDTGGDNQLLLYELSSIIKIATKADGFALYFLGECNNSLCIFTPPGIKEGKPRLI
PAGPITQGTTVSAYVAKSRKTLLEDILGDERFPRGTGLESRTIQSVLCLPIVTAIGDLIGILELYRHW
GKEAFCLSHQEVATANLAWASVAIHQVQVCRGLAKQTELNDFLLDVSKTYFDNIVAIDSLEHIMIYAKN
LVNADRCALFQVDHKNKELYSDLFDIGEEKEGKPVFKKTKIEIRFSIEKGIAGQVARTGEVLNIPDAYADP
RFNREVDLYTYTTRNILCMPIVSRGSVIGVVQMVNKGSAFSKTDENNFKMFVAVFCALALHCANMYHR
IRHSECIYRVTMEKLSYHSICTSEEWQGLMQFTLPVRLCKEIELFHFDDIGPFENMWPGIFVYVMVHRSCGT
SCFELEKLCRFIMSVKKNYRRVPYHNWKHAVTVAHCMYAILQNNHTLFTDLERKGLLIACLCHLDHRGF
SNSYLQKFDHPLAALYSTSTMEQHHSQTVSILQLEGHNIFSTLSSSEYEQVLEIIRKAIATDLALYFG
NRKQLEEMYQTGSLNLNNQSHRDRVIGLMMTACDLCVTKLWPVTKLTANDIYAEFWAEGDEMKKLGIQP
IPMMDRDKKDEVPQQLGFYNAVAIPCYTTLTQILPPTPELLKACRDNLSQWEKVIERGEETATWISSPSV
AQKAAASED
    
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_006661

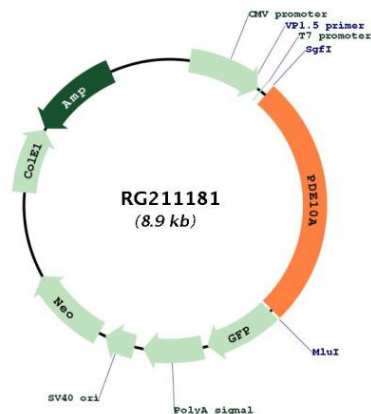
**ORF Size:** 2337 bp

**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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_006661.1</a></u> , <u><a href="#">NP_006652.1</a></u>
<b>RefSeq Size:</b>	4576 bp
<b>RefSeq ORF:</b>	2340 bp
<b>Locus ID:</b>	10846
<b>UniProt ID:</b>	<u><a href="#">Q9Y233</a></u>
<b>Cytogenetics:</b>	6q27
<b>Domains:</b>	PDEase, GAF
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Progesterone-mediated oocyte maturation, Purine metabolism
<b>Gene Summary:</b>	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 RG211181