

## Product datasheet for **RG209169**

### **PDE8A (NM\_002605) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PDE8A (NM_002605) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PDE8A
Synonyms:	HsT19550
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG209169 representing NM\_002605  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGGCTGTGCCCGAGCATCCACATTTCCGAGCGCTGGTGGCCGAGGACGCGCCTAGCCCCGCGGCAC  
 CGCCGCTGTCTCGGGCGGGCCGCGCTCCCGCAGGGCCAGAAGACGGCCGCTTGCCCCGACCCGCGG  
 CGCCGGCCTCTTGAGTCGGAGCTTCGCGACGGCAGCGCAAGAAGGTAGCAGTAGCTGATGTGCAGTTT  
 GGCCCATGAGATTTTCATCAAGATCAACTTCAGGTACTTTTAGTGTTTACCAAAGAAGATAACCAATGTA  
 ATGGATTCTGCAGGGCATGTGAAAAAGCAGGGTTAAAGTGTACAGTTACCAAGGAGGCTCAGGCTGTCT  
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 GAGGACTGTGCAGGTCTATCAGATCATAAAACCTCTCAGAAAACACAGTTATTGTTGGTGTAGTACGCA  
 GGGTGGATAGAGAAGAGTTGCCGTAATGCCTTTCATTTCTGCTGGATTTACAAGGAGGTATGTAGAAAA  
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 GAAGGAGTTAGGAGAAGTGCCTATAAATGAAAAAAGGCTGACTTGCTCGATACTATAAATTCATGCATC  
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 TGGCAACAATAAGGCTGAGAAAAATCCGAATGTGTTCACTCTGACACTCATACAGATAATCAGACAGGC  
 AAACATAAAGACAGGAGAAAAAGGCTCACTAGACGTCAAAGCTGTGCTCCCGTGAAGTGAAGTTTCCA  
 GCCAGAGACGACACTCTCCATGGCCCGGATACATTCCATGACAATTGAGGCGCCCATCACCAAGGTAAT  
 CAATATTATCAATGTGCCCAGGAAAGTAGTCCCATGCCTGTGACAGAAGCCCTAGACCGTGTGCTGGAA  
 ATTCTAAGAACCCTGAGTTATATTCACCACAGTTTGGTGTAAAAGATGATGATCCCATGCCAATGACC  
 TTGTTGGGGCTTAATGTCTGATGGTTTGCAGAACTATCAGGGAATGAATATGTTCTTTCAACAAAAA  
 CACTCAATGGTTTCAAGCAATATAACTACTCCCATCTCCCTTGATGATGTCCCACCACGGATAGCTCGG  
 GCCATGAAAAATGAGGAATACTGGGACTTTGATATTTTTGAACTGGAGGCTGCCACCACAATAGGCCTT  
 TGATTTATCTGGTCTCAAAATGTTTGTCTCGCTTTGGAATCTGTGAATCTTACTGCTCCGAGTCAAC  
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 CAGGAAGTATAAACACTATGCTTAGGACTCCAGAGAACCGACCTAATCAAACGAATGCTGATTAAT  
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 ATATTTTTCTCAGACTGATGAAGAGAAGCAGCAGGGCTTACCTGTGGTGTGCCAGTGTGTTGACAGAAAT  
 ACCTGCAGCATCCCAAATCCCAAATCTTTTCAATTGATTACTTCACTCACAGACATGTTTGTGCTGGG  
 ATGCCTTTGTAGACCTGCCTGATTAATGCAGCATCTTGACAACAACTTTAAATACTGGAAGGACTGGA  
 CGAAATGAAGCTGCGGAACCTCCGACCCTCCTGAA

**ACCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:** >RG209169 representing NM\_002605  
 Red=Cloning site Green=Tags(s)

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MGCAPSIHISERLVAEDAPSPAAPPLSSGGPRLPQGQKTAALPRTRGAGLLESELRDGSGKKVAVADVQF
GPMRFHQDQLQVLLVFTKEDNQNGFCRACEKAGFKCTVTKEAQAVLACFLDKHHDIIIDHRNPRQLDA
EALCRSIRSSKLSSENTVIVGVRRVDREELSVMPFISAGFTRRYVENPNIMACYNELQLLEFGEVRSQK
LRACNSVFTALENSEDAIEITSEDRFIQYANPAFETTMGYQSGELIGKELGEVPINEKKADLLDTINSCI
RIGKEWQGIYYAKKNGDNIQQNVKIIPVIGQGGKIRHYVSIIRVCNGNKAEKISECVQSDTHTDNQTG
KHKDRRKGSLDVKAVASRATEVSSQRRHSSMARIHSMTIEAPITKVINIINAAQESSPMPVTEALDRVLE
ILRTEL YSPQFGAKDDDPHANDLVGGLMSDGLRRLSGNEYVLSTKNTQMVSSNIITPISLDDVPPRIAR
AMENEYWFDFIFELEAATHNRPLIYLGLKMFARFGICEFLHCSESTLRWLQIIEANYHSSNPYHNSTH
SADVLHATAYFLSKERIKETLDPIDEVAALIAATIHVDVHPGRTNSFLCNAGSELAILYNDTAVLESHHA
ALAFQLTTGDDKCNIFKNMERNDYRTL RQGIIDMV LATEMTKHFHVNFVNSINKPLATLEENGETDKN
QEVINTMLRTPENRTL IKRMLIKCADVSNPCRPLQYCIWAARISEEYFSQTDEEKQQLPVVMPVFDNRN
TCSIPKSQISFIDYFITDMFDAWDAFVDLPDLMQHL DNNFKYWKGLDEMKL RNL RPPPE
  
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** Sgfl-Mlul

Cloning Scheme:



ACCN: NM\_002605

ORF Size: 2487 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\\_002605.3](#)

**RefSeq Size:** 3931 bp

**RefSeq ORF:** 2490 bp

**Locus ID:** 5151

**UniProt ID:** [O60658](#)

**Cytogenetics:** 15q25.3

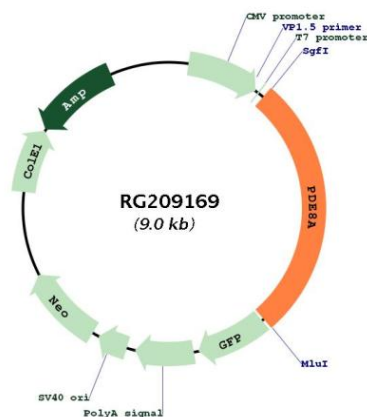
**Domains:** PDEase

**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 PDE8 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 found for this gene.[provided by RefSeq, Jul 2011]

### Product images:



Circular map for RG209169