

Product datasheet for **RG233126**

PDE8A (NM_001243137) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDE8A (NM_001243137) 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)



[View online »](#)

ORF Nucleotide
Sequence:

>RG233126 representing NM_001243137
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGAGATTTTCATCAAGATCAACTTCAGGTACTTTTAGTGTACCAAAGAAGATAACCAATGTAATGGAT
TCTGCAGGGCATGTGAAAAAGCAGGGTTTAAGTGTACAGTTACCAAGGAGGCTCAGGCTGTCTTGCCCTG
TTTCTGGACAAACATCATGACATTATCATCATAGACCACAGAAATCCTCGACAGCTGGATGCAGAGGCA
CTGTGCAGGTCTATCAGATCATCAAACCTCAGAAAAACAGTTATTGTTGGTGTAGTACGCAGGGTGG
ATAGAGAAGAGTTGTCCGTAATGCCTTTTCTGCTGGATTTACAAGGAGGTATGTAGAAAAACCCCAA
CATCATGGCTGTACAATGAAGTCTCCAGCTGGAGTTGGAGAGGTGCGATCACAACCTGAAACTCAGG
GCTTGAAGTCACTGCTGATTAGAAAAAGTGAAGATGCAATTGAAATTACAAGCGAAGACCGTT
TTATACAGTATGCAAATCCTGCATTTGAAACAACAATGGGCTATCAGTCAGGTGAATTAATAGGGAAGGA
GTTAGGAGAAGTGCCTATAAATGAAAAAAGGCTGACTTGCTCGATACTATAAATTCATGCATCAGGATA
GGCAAGGAGTGGCAAGGAATTTACTATGCCAAAAAGAAAAACGGAGATAATATACAACAAAAATGTGAAGA
TAATACCTGTCTATTGGACAGGGAGGAAAAATTAGACACTATGTGTCCATTATCAGAGTGTGCAATGGCAA
CAATAAGGCTGAGAAAAATATCCGAATGTGTTTCACTGCTGACACTCATAAGATAATCAGACAGGCAACAT
AAAGACAGGAGAAAAAGGCTCACTAGACGTCAAAGCTGTTGCCCTCCCGTGCACCTGAAGTTTCCAGCCAGA
GACGACTCTTCCATGGCCCGGATACATTCCATGACAATTGAGGCGCCCATCACCAAGGTAATCAATAT
TATCAATGCTGCCAGGAAAGTAGTCCCATGCCTGTGACAGAAGCCCTAGACCGTGTGCTGGAAATCTA
AGAACCCTGAGTTATATTCACCACAGTTTGGTGTAAAGATGATGATCCCATGCCAATGACCTTGTG
GGGGCTTAATGTCTGATGGTTTGGCAAGACTATCAGGGAATGAATATGTTCTTTCAAAAAAACACTCA
AATGGTTTCAAGCAATATAACTACTCCCATCTCCCTTGATGATGTCCACCACGGATAGCTCGGGCCATG
GAAAAATGAGGAATACTGGGACTTTGATATTTTTGAACTGGAGGCTGCCACCCACAATAGGCCTTTGATT
ATCTTGGTCTCAAAATGTTTGTCTGCTTTGGAATCTGTGAATTCTTACACTGCTCCGAGTCAACGTAAG
ATCATGGTTACAAATTATCGAAGCAATTATCATTCTCCAATCCCTACCACAATTCTACACATTCTGCT
GATGTGCTTCATGCCACTGCCTATTTTCTCTCAAGGAGAGGATAAAGGAACTTTAGATCCAATTGATG
AGGTCGCTGCACTCATCGCAGCCACCATTATGATGTGGATCACCTGGGAGAACCAACTCCTTCTGTG
TAATGCTGGAAGTGAAGTGGCCATTTTGTACAATGACACTGCTGTGCTGGAGAGCCACCATGCGGCCTG
GCCTTCCAGCTGACCCTGGAGATGATAAATGCAATATATTTAAAAACATGGAGAGGAATGATTATCGGA
CACTGCGCCAGGGGATTATCGACATGGTCTTAGCCACAGAAATGACAAAGCACTTTGAGCATGTCAACAA
ATTTGTCAACAGCATCAACAAACCTTTGGCAACTAGAAAGAAAATGGGGAACTGATAAAAAACAGGAA
GTGATAAACACTATGCTTAGGACTCCAGAGAACCAGGACCCTAATCAAACGAATGCTGATTAATGTGCTG
ATGTGTCCAATCCCTGCCAGCCCTGCAGTACTGCATCGAGTGGGCTGCACGATTTTCGGAAGAATATTT
TTCTCAGACTGATGAAGAGAAGCAGCAGGGCTTACCTGTGGTGTGCCAGTGTGTTGACAGAAATACCTGC
AGCATCCCCAAATCCCAATCTCTTTTATTGATTACTTCATCACAGACATGTTTGATGCTTGGGATGCCT
TTGTAGACCTGCCTGATTTAATGCAGCATCTTGACAACAACCTTTAAATACTGGAAAGGACTGGACGAAAT
GAAGCTGCGGAACCTCCGACCACCTCTGAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG233126 representing NM_001243137
 Red=Cloning site Green=Tags(s)

MRFHQDQLQVLLVFTKEDNQCNGFCRACEKAGFKCTVTKEAQAFLDKHHDIIIDHRNPRQLDAEA
 LCRSIRSSKLSENTVIVGVVRRVDREELSVMPFISAGFTRRYVENPNIMACYNELLQLEFGEVRSQKLKLR
 ACNSVFTALENSEDAIEITSEDRFIQYANPAFETTMGYQSGELIGKELGEVPINEKKADLLDTINSCIRI
 GKEWQGIYYAKKNGDNIQQNVKIIPVIGQGGKIRHYVSIIRVCNGNNKAEKISECVQSDTHTDNQTGKH
 KDRRKGSGLDVKAVASRATEVSSQRRHSSMARIHSMITIEAPITKVINIINAQESSMPVTEALDRVLEIL
 RTTELYSPQFGAKDDDPHANDLVGGLMSDGLRRLSGNEYVLSTKNTQMVSSNIITPISLDDVPPRIARAM
 ENEEYWDFDIFELEAATHNRPLIYLGLKMFARFGICEFLHCSESTLRSLWQIIEANYHSSNPYHNSTHSA
 DVLHATAYFLSKERIKETLDPIDEVAALIAATIHVDVHPGRNTSFLCNAGSELAILEYNDTAVLESHHAAL
 AFQLTTGDDKCNIFKNMERNDYRTL RQGIIDMLATEMTKHFHVNKFVNSINKPLATLEENGETDKNQE
 VINTMLRTPENRTL IKRMLIKCADVSNPCRPLQYCIWAARISEEYFSQTDEEKQQLPVMPVDFDRNTC
 SIPKQSISFIDYFITDMFDAWDAFVDLPDLMQHL DNNFKYWKGLDEMCLRNL RPPPE

TRTRPLE - GFP Tag - V

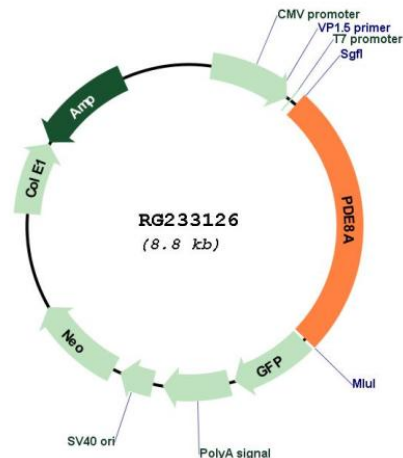
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001243137

ORF Size: 2271 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_001243137.2](#)

RefSeq Size: 3728 bp

RefSeq ORF: 2274 bp

Locus ID: 5151

UniProt ID: [O60658](#)

Cytogenetics: 15q25.3

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]