

Product datasheet for **RG219619**

PDE3B (NM_000922) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDE3B (NM_000922) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PDE3B
Synonyms:	cGIPDE1; HcGIP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG219619 representing NM_000922 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGGAGGGACGAGCGAGACGCCAAAGCCATGCGGTCCCTGCAGCCGCCGGATGGGGCCGGCTCGCCCC
CCGAGAGTCTGAGGAACGGCTACGTGAAGAGCTGCGTGAGCCCTTGCAGCAGGACCCCTCCGCGCGGCTT
CTTCTTCCACCTCTGCCGCTTCTGCAACGTGGAGCTGCGGCCGCCCGGCTCTCCCCAGCAGCCGCG
CGCTGCTCCCCCTTCTGCCGGGCGGCCTCTCGCTGGGCGCCCTGGCTGCCTTTGTCTCGCCCTGCTGC
TGGGCGCGGAACCCGAGAGCTGGGCTGCCGGGCGCCTGGCTGCGGACGCTGCTGAGCGTGTGTTGCA
CAGCTTGAGCCCTCTTTCAGCATCGCCTGTGCCTTCTTCTTCTCACCTGCTTCTCACCCGGACCAAG
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CACGCCCCCGGAGGCGGCAGCGGCAGGTTGCTGCTGGTGTGAGCTGCGTAGGGCTGCTGCTGACGCTC
GCGCACCCGCTGCGGCTCCGGCACTGCGTCTGGTGTGCTCCTGGCCAGCTTCGCTGGTGGGTCTCT
TCACCAGCCTCGGGTCTGCTGCCCTCCGCCCTCAGGCCGCTGCTCTCCGGCCTGGTGGGGGCGCTGGCTG
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CAAAGGTCATCTTCTGTATCACTGACTACCATGTAGGTCTCAGAAGAGCTGGTGTGTTTGTCCAGTCTGA
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ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG219619 representing NM_000922
 Red=Cloning site Green=Tags(s)

MRRDERDAKAMRSLQPPDGAGSPPELNRNGYVKSCVSPLRQDPPRGFFHFLCRFCNVELRPPPASPQQPR
 RCSPFCRARLSLGAALFVLAALLGAEPESWAAGAALWRLTLLSVCVSHLSPLFSIACAFFFLTCFLTRTK
 RGPGRSCGSWLLALPACCYLGDFLVWQWWSWPWGDGAGSAAPHTPPEAAAGRLLLVLSCVGLLLTL
 AHPLRLRHCVLVLLLASFVWVVSFTSLGSLPSALRPLL SGLVGGAGLLALGLDHFQIREAPLHPRLSS
 AAEEKVPVIRPRRRSSCVSLGETAASYGSCKIFRRPSLPCISREQMILWDWDLKQWYKPHYQNSGGNG
 VDL SVLNEARNMVDLLTDP SLPPQVISSLRISL MGA FSGSCRPKINPLTPFGFYPCSEIEDPAEKG
 DRKLNKGLNRNSLPTPQLRRSSGTSGLLPVEQSSRWDRNNGKRPHQEFGISQGCYLNGPFNSNLLTIPK
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 TPDFYQQLRNSDNLNCSGQHMLKYVSTSESDGTDCSCGKS GEEENIFSKESFKLMETQQEEETEKKDS
 RKL FQEGDKWLT EEAQSEQQTNIEQEVSLDLILVEEYDSLIEKMSNWNFP I FELVEKMGEKSGRILSQVM
 YTLFQDTGLLEIFK IPTQQFMNYFRALENGYRDIPYHNRIHATDVLHAVWYLTTRPVPLQQIHNGCGTG
 NETDSDGRINHGR IAYISSKSCSNPDES YGCLSSNIPALELMALYVAAAMHDYDHPGRTN AFLVATNAPQ
 AVL YNDRSVLENHHAASAWNLYLSRPEYNFLHLHDHVEFKRFRFLVIEA I L ATDLKKHFDLAEFNANAK
 DVNSNGIEWSNENDRLLVCQVCIKLADINGPAKVRDLHLKWTEGIVNEFYEQGDEEANLGLPI SPFMDRS
 SPQLAKLQESFITHIVGPLCNSYDAAGLLPGQWLEAEEDNDTESGDDEDGEELDT EDEEMENLNPKPPR
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TRTRPLE – GFP Tag – V

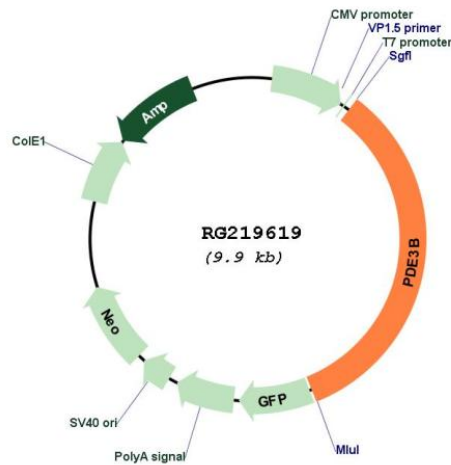
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_000922

ORF Size: 3336 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:	<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:	<u>NM_000922.2, NP_000913.2</u>
RefSeq Size:	4784 bp
RefSeq ORF:	3339 bp
Locus ID:	5140
UniProt ID:	<u>Q13370</u>
Cytogenetics:	11p15.2
Domains:	PDEase, HDc
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Insulin signaling pathway, Progesterone-mediated oocyte maturation, Purine metabolism
Gene Summary:	Cyclic nucleotide phosphodiesterase with a dual-specificity for the second messengers cAMP and cGMP, which are key regulators of many important physiological processes. May play a role in fat metabolism. Regulates cAMP binding of RAPGEF3. Through simultaneous binding to RAPGEF3 and PIK3R6 assembles a signaling complex in which the PI3K gamma complex is activated by RAPGEF3 and which is involved in angiogenesis.[UniProtKB/Swiss-Prot Function]