

Product datasheet for RC219619

PDE3B (NM_000922) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDE3B (NM_000922) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PDE3B
Synonyms:	cGIPDE1; HcGIP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC219619 representing NM_000922 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGGAGGGACGAGCGAGACGCCAAAGCCATGCGGTCCCTGCAGCCGCCGGATGGGGCCGGCTCGCCCC
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CTTCTTCCACCTCTGCCGCTTCTGCAACGTGGAGCTGCGGCCGCCCGGCTCTCCCCAGCAGCCGCG
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CAGCTTGAGCCCCCTTTCAGCATCGCCTGTGCCTTCTTCTCCTCACCTGCTTCCACCCGGACCAAG
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CACGCCCCCGGAGGCGGCAGCGGCAGGTTGCTGCTGGTGTGAGCTGCGTAGGGCTGCTGCTGACGCTC
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC219619 representing NM_000922
 Red=Cloning site Green=Tags(s)

MRRDERDAKAMRSLQPPDGAGSPPELNRNGYVKSCVSPLRQDPPRGFFHFLCRFCNVELRPPPASPQQPR
 RCSPFCRARLSLGAALAVLALLLGAEPESWAAGAAWLRTLLSVCSHLSPLFSIACAFFFLTCTFLTRTK
 RGPGRSCGSWLLALPACCYLGDFLVWQWWSWPWGDGAGSAAPHTPPEAAAGRLLLVLSCVGLLLTL
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 AAEEKVPVIRPRRRSSCVSLGETAASYGSKIFRRPSPPCISREQMILWDWDLKQWYKPHYQNSGGNG
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 RKL FQEGDKWL TEEAQSEQQTNIEQEVSLDLILVEEYDSLIEKMSNWNFPFIFELVEKMGEKSGRILSQVM
 YTLFQDTGLLEIFKIPQQFMNYFRALENGYRDIPIYHNRIHATDVLHAVWYL TTRPVPLQQIHNGCGTG
 NETDSDGRINHGRIAYISSKSCSNPDES YGCLSSNIPALELMALYVAAAMHDYDHPGRNTAFLVATNAPQ
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 SPQLAKLQESFITHIVGPLCNSYDAAGLLPGQWLEAEEDNDTESGDDEDGEELDTEDEEMENNLNPKPPR
 RKSRRRIFCQLMHHLTENHKIWKIEIVEEEKCKADGNKLQVENS SLPQADEIQVIEEAEDEE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3422_a06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



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:**
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.

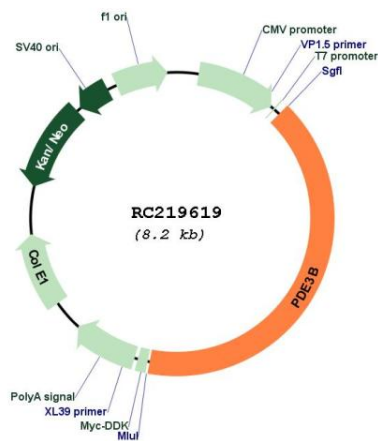
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_000922.4](#)

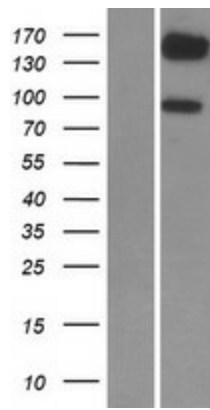
RefSeq Size: 4784 bp

RefSeq ORF:	3339 bp
Locus ID:	5140
UniProt ID:	Q13370
Cytogenetics:	11p15.2
Domains:	PDEase, HDc
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Insulin signaling pathway, Progesterone-mediated oocyte maturation, Purine metabolism
MW:	124.2 kDa
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]

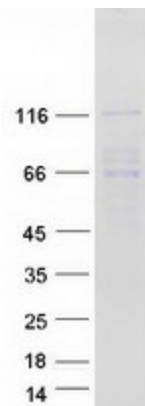
Product images:



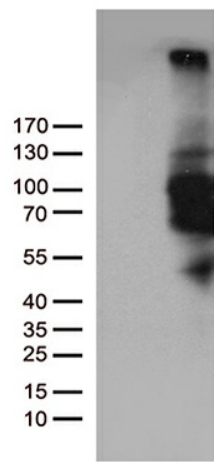
Circular map for RC219619



Western blot validation of overexpression lysate (Cat# [LY424435]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219619 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PDE3B protein (Cat# [TP319619]). The protein was produced from HEK293T cells transfected with PDE3B cDNA clone (Cat# RC219619) using MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PDE3B (Cat# RC219619, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PDE3B (Cat# [TA811688]). Positive lysates [LY424435] (100ug) and [LC424435] (20ug) can be purchased separately from OriGene.