

Product datasheet for RC216236

PDE6 gamma (PDE6G) (NM_002602) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDE6 gamma (PDE6G) (NM_002602) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PDE6 gamma
Synonyms:	PDEG; RP57
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC216236 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAACCTGGAACCGCCCAAGGCTGAGTTCGGTCAGCCACCAGGGTGGCCGGGGACCTGTCAACCCCA
GGAAAGGGCCCCCTAAATTTAAGCAGCGACAGACCAGGCAGTTCAAGAGCAAGCCCCAAAGAAAGGCGT
TCAAGGGTTTGGGACGACATCCCTGGAATGGAAGGCCTGGGAACAGACATCACAGTCATCTGCCCTGG
GAGGCCTCAACCACCTGGAGCTGCACGAGCTGGCCCAATATGGCATCATC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC216236 protein sequence Red=Cloning site Green=Tags(s)
	MNLEPPKAEFRSATRVAGGPVTPRKGPPKFKQRQTRQFKSKPPKKGVQGFDDIPGMEGLGTDITVICPW EAFNHLELHELAQYGII

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:	https://cdn.origene.com/chromatograms/mk6457_a12.zip
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Restriction Sites:	Sgfl-Mlul
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Cloning Scheme:



ACCN: NM_002602

ORF Size: 261 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_002602.4](#)

RefSeq Size: 1064 bp

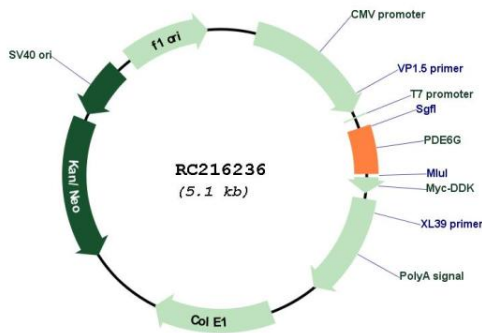
RefSeq ORF: 264 bp

Locus ID: 5148

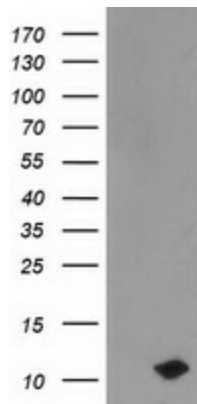
UniProt ID: [P18545](#)
 Cytogenetics: 17q25.3
 Protein Families: Druggable Genome
 Protein Pathways: Progesterone-mediated oocyte maturation, Purine metabolism
 MW: 9.6 kDa

Gene Summary: This gene encodes the gamma subunit of cyclic GMP-phosphodiesterase, which is composed of alpha- and beta- catalytic subunits and two identical, inhibitory gamma subunits. This gene is expressed in rod photoreceptors and functions in the phototransduction signaling cascade. It is also expressed in a variety of other tissues, and has been shown to regulate the c-Src protein kinase and G-protein-coupled receptor kinase 2. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2009]

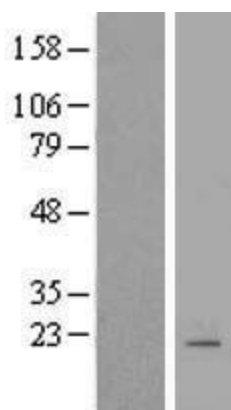
Product images:



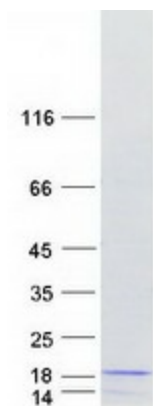
Circular map for RC216236



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PDE6G (Cat# RC216236, 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-PDE6G(Cat# [TA503686]). Positive lysates [LY419220] (100ug) and [LC419220] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY419220]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216236 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PDE6G protein (Cat# [TP316236]). The protein was produced from HEK293T cells transfected with PDE6G cDNA clone (Cat# RC216236) using MegaTran 2.0 (Cat# [TT210002]).