

Product datasheet for **RG200445**

PDE6 beta (PDE6B) (NM_000283) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDE6 beta (PDE6B) (NM_000283) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PDE6 beta
Synonyms:	CSNB3; CSNBAD2; GMP-PDEbeta; PDEB; rd1; RP40
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>RG200445 representing NM_000283
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGC**

ATGAGCCTCAGTGAGGAGCAGGCCCGAGCTTTCTGGACCAGAACCCCGATTTTGCCCGCCAGTACTTTG
GGAAGAACTGAGCCCTGAGAATGTGGCCGCGGCTGCGAGGACGGTGCCCGCCGACTGCGACAGCCT
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TCTTCATGTACCGCCAGCGCAACGGCGTGGCCGAGCTGGCCACCAGGCTTTTCAGCGTGCAGCCGGACAG
CGTCTGGAGGACTGCCTGGTCCCCCGACTCCGAGATCGTCTTCCACTGGACATCGGGGTCTGGGC
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AGTGAAGGCTCTGGAGGAGAAGGAGGAGGAGGAGGGTGGCAGCCAAGAAGGCACAGAAATTTGCAAT
GGCGGCCAGCACCAAGTCTTCAACCTGCTGTATCCTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG200445 representing NM_000283
 Red=Cloning site Green=Tags(s)

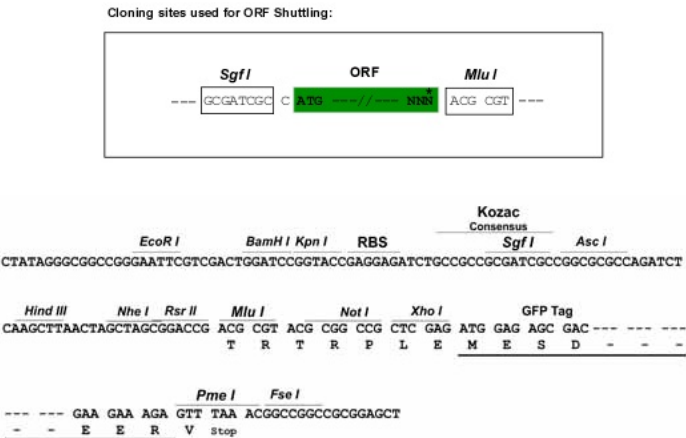
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 LETTRKEIVMAMMMTACDL SAITKPWEVQSKVALLVAAEFWEQGD LERTVLDQQIPMMDRNKAAELPKL
 QVGFIDFVCTFVYKEFSRFHEEILPMFDR LQNNRKEWKALADEYEAKVKALEEKEEEERVA AKKGTEICN
 GGPAPKSSTCCIL

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN:	NM_000283
ORF Size:	2562 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_000283.2](#), [NP_000274.2](#)

RefSeq Size: 3283 bp

RefSeq ORF: 2565 bp

Locus ID: 5158

UniProt ID: [P35913](#)

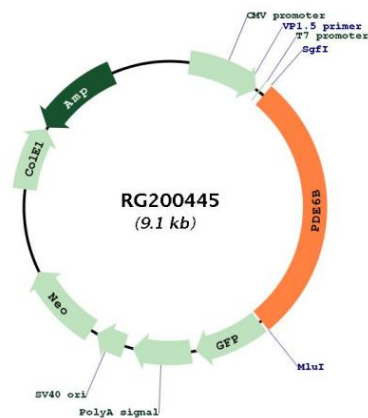
Cytogenetics: 4p16.3

Domains: PDEase, GAF, HDc

Protein Families: Druggable Genome

Gene Summary: Photon absorption triggers a signaling cascade in rod photoreceptors that activates cGMP phosphodiesterase (PDE), resulting in the rapid hydrolysis of cGMP, closure of cGMP-gated cation channels, and hyperpolarization of the cell. PDE is a peripheral membrane heterotrimeric enzyme made up of alpha, beta, and gamma subunits. This gene encodes the beta subunit. Mutations in this gene result in retinitis pigmentosa and autosomal dominant congenital stationary night blindness. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2009]

Product images:



Circular map for RG200445