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Product datasheet for RG226950

CNGB1 (NM_001135639) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CNGB1 (NM_001135639) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CNGB1
Synonyms:	CNCG2; CNCG3L; CNCG4; CNG4; CNGB1B; GAR1; GARP; GARP2; RCNC2; RCNCb; RCNCbeta; RP45
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG226950 representing NM_001135639
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTTGGGCTGGGTCCAGAGGGTGCTGCCTCAGCCCCCAGGGACCCCTCGGAAGACCAAGATGCAGGAGG
AAGAGGAAGTGGAACCAGAGCCAGAGATGGAGGCGGAGGTGGAACCAGAACCGAATCCTGAGGAGGCCGA
GACAGAGTCCGAGTCCATGCCCCCCGAAGAGTCATTCAAGGAGGAGGAAGTGGCTGTGGCAGACCCAAGC
CCTCAGGAGACCAAGGAGGCTGCCCTTACTTCCACCATATCCCTCCGGGCCCAGGGCGCTGAGATTTCTG
AAATGAATAGTCCCAGCCGCAGGGTACTGACCTGGCTCATGAAGGGCGTAGAGAAGGTGATCCCGCAGCC
TGTTCACAGCATCACGGAGGACCCGGCTCAGATCCTGGGGCATGGCAGCACTGGGGACACAGGGTGCACA
GATGAACCCAATGAGGCCCTTGAGGCCCAAGACACTAGGCCTGGGCTGCGGCTGCTTCTGTGGCTGGAGC
AGAATCTGGAAAGAGTGCTTCCTCAGCCCCCCAAATCCTCTGAGGTCTGGAGAGATGAGCCTGCAGTTGC
TACAGGTGCTGCCTCAGACCCAGCGCCTCCAGGACGCCCCCAGGAAATGGGGCCCAAGCTGCAGGCCCGG
GAGACCCCCTCCCTGCCCACACCCATCCCCCTGCAGCCCAAGGAGGAACCCAAGGAGGCACCAGCTCCAG
AGCCCCAGCCCGGCTCCCAGGCCCAGACCTCCTCCCTGCCACCAACCAGGGACCCTGCCAGGCTGGTGGC
ATGGGTCCTGCACAGGCTGGAGATGGCCTTGCCGCAGCCAGTGCTACATGGGAAAATAGGGGAACAGGAG
CCTGACTCCCCTGGGATATGTGATGTGCAGACCAGGGTGATGGGAGCTGGAGGTCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

>RG226950 representing NM_001135639
Red=Cloning site Green=Tags(s)

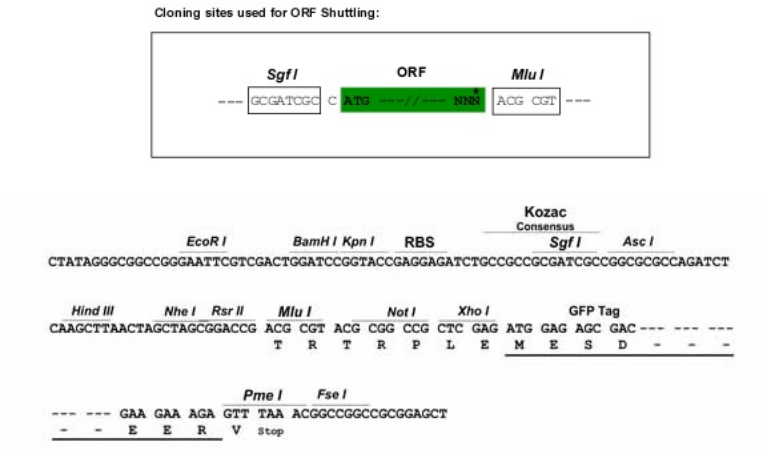
MLGWVQRVLPQPPGTPRKTKMQEEEEVEPEPEMEAEVEPEPNPEEAETESESMPPEESFKEEEVAVADPS
PQETKEAALTSTISLRAQGAEISEMNSPSRRVLTWLMKGVEKVIPQPVHSITEDPAQILGHGSTGDTGCT
DEPNEALEAQDTRPGLRLLLWLEQNLERVLPQPPKSSEVWRDEPAVATGAASDPAPPGRPQEMGPKLQAR
ETPSLPTPIPLQPKEEPKEAPAPEPQPGSQAQTSSLPPTRDPARLVAWVLHRLEMALPQPVLHGKIGEQE
PDSPGICDVQTRVMGAGGL

TRTRPLE - GFP Tag - V

Chromatograms: https://cdn.origene.com/chromatograms/ja3336_c02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001135639

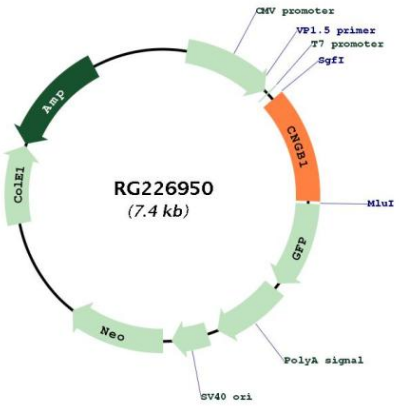
ORF Size: 897 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_001135639.2
RefSeq Size:	1648 bp
RefSeq ORF:	900 bp
Locus ID:	1258
UniProt ID:	Q14028
Cytogenetics:	16q21
Protein Families:	Druggable Genome, Ion Channels: Cyclic nucleotide gated
Protein Pathways:	Olfactory transduction
Gene Summary:	In humans, the rod photoreceptor cGMP-gated cation channel helps regulate ion flow into the rod photoreceptor outer segment in response to light-induced alteration of the levels of intracellular cGMP. This channel consists of two subunits, alpha and beta, with the protein encoded by this gene representing the beta subunit. Defects in this gene are a cause of cause of retinitis pigmentosa type 45. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2013]

Product images:



Circular map for RG226950