

Product datasheet for **SC325738**

CNGB1 (NM_001135639) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CNGB1 (NM_001135639) Human Untagged Clone
Tag:	Tag Free
Symbol:	CNGB1
Synonyms:	CNCG2; CNCG3L; CNCG4; CNG4; CNGB1B; GAR1; GARP; GARP2; RCNC2; RCNCb; RCNCbeta; RP45
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC325738 representing NM_001135639. Blue=Insert sequence Red=Cloning site Green=Tag(s)

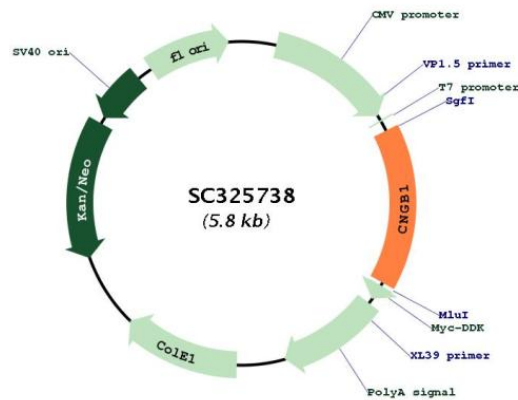
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ATGTTGGGCTGGGTCCAGAGGGTCTGCCTCAGCCCCCAGGGACCCCTCGGAAGACCAAGATGCAGGAG
GAAGAGGAAGTGGAAACCAGAGCCAGAGATGGAGGCGGAGGTGGAACCAGAACCGAATCCTGAGGAGGCC
GAGACAGAGTCCGAGTCCATGCCCCCCGAAGAGTCATTCAAGGAGGAGGAAGTGGCTGTGGCAGACCCA
AGCCCTCAGGAGACCAAGGAGGCTGCCCTTACTTCCACCATATCCCTCCGGGCCAGGGCGCTGAGATT
TCTGAAATGAATAGTCCCAGCCGAGGGTACTGACCTGGCTCATGAAGGGCGTAGAGAAGGTGATCCCG
CAGCCTGTTACAGCATCAGGAGGACCCGGCTCAGATCCTGGGGCATGGCAGCACTGGGGACACAGGG
TGCACAGATGAACCAATGAGGCCCTTGAGGCCAAGACTAGGCTGGGCTGCGGCTGCTTCTGTGG
CTGGAGCAGAATCTGAAAGAGTCTTCTCAGCCCCCAAATCCTCTGAGGTCTGGAGAGATGAGCCT
GCAGTTGCTACAGGTGCTGCCTCAGACCCAGCGCTCCAGGACGCCCCAGGAAATGGGGCCCAAGCTG
CAGGCCCGGGAGACCCCTCCCTGCCACACCCATCCCCCTGCAGCCCAAGGAGGAACCAAGGAGGCA
CCAGCTCCAGAGCCCCAGCCCGGCTCCCAGGCCAGACCTCCTCCCTGCCACCAACCAGGGACCCTGCC
AGGCTGGTGGCATGGGTCTGCACAGGCTGGAGATGGCCTTGCCGAGCCAGTGTACATGGGAAAATA
GGGGAACAGGAGCCTGACTCCCCGGGATATGTGATGTGCAGACCAGGGTATGGGAGCTGGAGGTCTC
TGA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGCGC
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Restriction Sites: SgfI-MluI



[View online »](#)

Plasmid Map:



ACCN: NM_001135639

Insert Size: 900 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001135639.1](#)

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
MW:	32.5 kDa

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]

Transcript Variant: This variant (2) uses an alternate exon and lacks the 3' coding region, compared to variant 1. The resulting isoform (b), also known as GARP2, is much shorter and has a unique C-terminus, compared to isoform a.