

Product datasheet for **SC122040**

CNG1 (CNGA1) (NM_000087) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CNG1 (CNGA1) (NM_000087) Human Untagged Clone
Tag:	Tag Free
Symbol:	CNGA1
Synonyms:	CNCG; CNCG1; CNG-1; CNG1; RCNC1; RCNCa; RCNCalpha; RP49
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None



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Fully Sequenced ORF: >NCBI ORF sequence for NM_000087, the custom clone sequence may differ by one or more nucleotides

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ATGAAACTATCCATGAAGAACAATATTATCAATACACAGCAGTCTTTTGTAAACCATGCCCAATGTGATTG
TACCAGATATTGAAAAGGAAATACGAAGGATGGAAAAATGGAGCATGCAGCTCCTTTTCTGAGGATGATGA
CAGTGCCTCTACATCTGAAGAATCAGAGAATGAAAACCCATGCAAGGGGTTCCCTTATAGTTATAAGTCA
CTCAGAAAAGGGAGGACCATCACAGAGGGAGCAGTACCTGCCTGGTGCCATTGCACTTTTTAAATGTGAACA
ACAGCAGCAATAAGGACCAGGAACCCAGAAGAAAAAGAAAAAGAAAAAGAAAAAGAAAGCAAGTCAAGTCA
TGATAAAAACGAAAAATAAAACGACCCAGAGAAGAAAAAGAAAAAGGACAAAGAGAAGAAAAAGAAA
GAGGAGAAAAGCAAAGATAAGAAAGAAGAGGAGAAGAAAGAGTTGTGGTTATTGATCCCTCGGGAACA
CATATTACAACCTGGCTGTTTTGCATCACATTACCTGTTATGTACAACCTGGACAATGGTTATTGCCAGAGC
ATGTTTTGATGAACTTCAATCTGATTACCTAGAATATTGGCTCATTGGATTACGTATCAGACATAGTC
TATTTAATCGATATGTTGTACGAACAAGGACAGGTTACCTAGAACAAGGACTGCTGGTAAAGGAAGAAC
TTAAACTCATAAATAAATAAAATCCAACCTGCAATTTAAACTTGATGTTCTGTCACTGATACCAACTGA
TTTGCTGTATTTAAGTTAGGGTGGAACTATCCAGAAATTAGATTAACAGGTTGTTACGGTTCTCTCGT
ATGTTTGAGTTCTTCCAGAGAACAGAAACAAGGACAAACTATCCAACATCTTCAGGATTTCCAACCTTG
TTATGTATATCGTCATCATTATCCACTGGAATGCATGTGTGTTCTACTCTATTTCTAAAGCTATTGGATT
TGGAAATGATACATGGGTCTACCTGATTAATGATCCTGAATTTGGCCGTTTGGCTAGAAAAATACGTA
TACAGCCTTTACTGGTCTACACTGACTTTGACTACCATTGGTGAACACCCCTCCCGTGAGGGATTCTG
AGTATGCTTTTGGTGGTTGATTTCTAATTGGAGTGTAATTTTTGCTACCATCGTTGGTAACATAGG
TTCTATGATTTCCAACATGAATGCAGCCAGAGCAGAATTTCAAGCAAGAATTGATGCTATCAAGCAATAT
ATGCATTTTCGAAATGTAAGCAAAGATATGGAAAAGAGGGTTATTAATGGTTTGACTACCTGGGACCA
ACAAAAAACAGTTGATGAGAAAAGAAGTCTTAAAGTATCTACCTGATAAACTAAGAGCAGAAATTGCCAT
CAACGTTCACTTAGACACATTAATAAAAGGTACGCATTTTTGCTGATTGTGAAGCTGGTCTGTTGGTGGAG
TTGGTCTTGAAATTGCAACCCCAAGTCTACAGTCTGGAGATTATATTTGCAAGAAAGGGGATATCGGAC
GAGAGATGTACATTATCAAGGAAGGCAAACCTCGCTGTGGTGGCAGATGATGGAGTCACTCAGTTTGGT
ATTGAGCGATGGCAGCTACTTCGGTGAGATCAGCATTCTTAACATTAAGGGAGCAAAGCTGGCAATCGA
AGAACGGCCAATATTAAGATTTGGCTACTCAGACCTGTTCTGTCTCTCAAAGATGACCTCATGGAAG
CTCTAACTGAGTACCCAGATGCCAAAACATGCTGGAAGAGAAAGGGAAGCAGATTTAATGAAAGATGG
TCTACTGGATCTAAACATTGCAAAATGCTGGCAGTGATCCTAAAGATCTTGAAGAGAAGGTTACTCGAATG
GAGGGGTGAGTAGACCTCCTGCAAACAGGTTTGGCCGAATCTTGCTGAGTATGAGTCCATGCAGCAGA
AACTGAAACAAAGATTAACCAAGGTTGAGAAATTTCTGAAACCGCTTATTGACACAGAATTTCAAGTAT
TGAGGGACCTGGAGCGGAAAGTGGGCCATCGACTCTACATAG
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5' Read Nucleotide Sequence:	>OriGene 5' read for NM_000087 unedited NAAAGTTTANCATTTGTNATACGACTTACTATNAGGGCAGGCCGNAATTCGCCCTCTC CAAANATACTGAAACTATGCCATGNAANAACAATATTATCAATACACAGCAGTCTTTTGT AACCATGCCCAATGTGATTGTACCAGATATTGAAAAGGAAATACGAAGGATGGAAAATGG AGCATGCAGCTCCTTTTCTGAGGATGATGACAGTGCCTCTACATCTGAAGAATCAGAGAA TGAAAACCCTCATGCAAGGGTTCCTTTAGTTATAAGTCACTCAGAAAAGGAGGACCATC ACAAGAGGGGAGCAGTACCTGCCTGGTGCCATTGCACCTTTTAAATGTGAACAACAGCAGCA ATAAGGACCAGGAACCAGAAAGAAAAAAGAAAAAGAAAAAGAAAAAGAAAGAGCAAGTCAG ATGATAAAAACGAAAATAAAAACGACCCAGAGAAGAAAAAGAAAAAGGACAAAAGAGA AGAAAAAGAAAGAGGAGAAAAGCAAAGATAAGAAAGAAGAGGAGAAGAAAGAAAGTTGTGG TTATTGATCCCTCGGAAACACATATTACAACCTGGCTGTTTTGCATCACATTACCTGTTA TGTACAACCTGGACAATGGTTATTGCCAGAGCATGTTTTGATGAACCTCAATCTGATTACC TAGAATATTGGCTCATTTTGGATTACGTATCAGACATAGTCTATTTAATCGATATGTTTG TACGAACAATGACAGGTTACCTAGAACAAGGACTGCTGGTAAAGGAAGAACTTAAACTCA TAAATAAATAAATCCAACCTTTGCATTTANACTTGATGTTCTGCTACTGATACCAACTG ATTTGCTGATTTTAAAGTTAGGGTGGAACCTATCCAGAAATTAGATTAACAGGTTGNTAC AGNTCTCTCGTATGTTTGAGTTCTTTCAGAGAAACAGAACC
Restriction Sites:	Please inquire
ACCN:	NM_000087
Insert Size:	2400 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).
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:	<ol style="list-style-type: none">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_000087.2 , NP_000078.2
RefSeq Size:	2532 bp
RefSeq ORF:	2073 bp
Locus ID:	1259
UniProt ID:	P29973
Cytogenetics:	4p12
Protein Families:	Druggable Genome, Ion Channels: Cyclic nucleotide gated, Transmembrane

Gene Summary:

The protein encoded by this gene is involved in phototransduction. Along with another protein, the encoded protein forms a cGMP-gated cation channel in the plasma membrane, allowing depolarization of rod photoreceptors. This represents the last step in the phototransduction pathway. Defects in this gene are a cause of retinitis pigmentosa autosomal recessive (ARRP) disease. Multiple transcript variants have been found for this gene. [provided by RefSeq, Oct 2019]

Transcript Variant: This variant (2) differs in the 5' UTR and coding sequence compared to variant 1. The resulting isoform (2) has a shorter N-terminus compared to isoform 1.