

Product datasheet for **RC214525**

CNG1 (CNGA1) (NM_000087) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CNG1 (CNGA1) (NM_000087) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CNG1
Synonyms:	CNCG; CNCG1; CNG-1; CNG1; RCNC1; RCNCa; RCNCalpha; RP49
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC214525 representing NM_000087
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGCATCGCC

ATGAAACTATCCATGAAGAACAATATTATCAATACACAGCAGTCTTTTGTAAACATGCCCAATGTGATTG
TACCAGATATTGAAAAGGAAATACGAAGGATGGAAAATGGAGCATGCAGCTCCTTTTCTGAGGATGATGA
CAGTGCCTCTACATCTGAAGAATCAGAGAATGAAAACCTCATGCAAGGGTTTCCTTTAGTTATAAGTCA
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ACAGCAGCAATAAGGACCAGGAACCAGAAGAAAAAGAAAAAGAAAAAGAAAAAGAAAGAGCAAGTCAAGTCA
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CATATTACAACCTGGCTGTTTTCATCACATTACCTGTTATGTACAACCTGGACAATGGTTATTGCCAGAGC
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TTTGCTGTATTTAAGTTAGGGTGGAACTATCCAGAAATTAGATTAACAGGTTGTTACGGTTCTCTCGT
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GAGGGTCACTAGACCTCCTGCAAACAGGTTTGCCTCAATCTTGGCTGAGTATGAGTCCATGCAGCAGA
AACTGAAACAAAGATTAACCAAGGTTGAGAAATTTCTGAAACCGCTTATTGACACAGAATTTCAAGTAT
TGAGGGACCTGGAGCGGAAAGTGGGCCCATCGACTCTACA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC214525 representing NM_000087
Red=Cloning site Green=Tags(s)

MKLSMKNNIINTQQSFVTMPNVI VPDIEKEI RRMENGACSSFSEDDDSASTSESEENENPHARGSFYSYK
 LRKGGPSQREQYLPGAIALFVNNSSNKDQEPEEKKKKKKEKSKSDDKNENKNDPEKKKKKKDKK
 EEKSKDKKEEKKVVIDPSGNTYYNWLFCITLPVMYNWMTVIARACFDELQSDYLEYWLILDYVSDIV
 YLIDMFVRTRTGYLEQGLLVKEELKLINKYKSNLQFKLDVLSL IPTDLLYFKLGWNYPEIRLNRLRFSR
 MFEFFQRTE TRTNYPNIFRISNLVYIVIIHWNACVFYSISKAIGFGNDTWVYPDINDPEFGRLARKYV
 YSLYWSTLTLTTIGETPPPVRDSEYVFVVVDFLIGVLI FATIVGNIGSMISNMNAARAEFQARIDA
 IKQYMHFRNVSKDMEKRVIKWFDYLWTKKT VDEKEVLKYL PDKLRAEIAINVHLDLTKKVRIFAD
 CEAGLLVE LVLKLQPQVYSPGDYICKKGDIGREMYI IKEGKLAVVADDGVTQFVVLSDGSYFGE
 ISILNIKGSKAGNR RTANIKSIGYSDLFCLSKDDLMEALTEY PDAKTMLEEKGKQILMKDGLLDL
 NIANAGSDPKDLEEKVTRM EGSVDLLQTRFARILAEYESMQQK LKQRLTKVEKFLKPLIDTEFSSIEG
 PGAESGPIDST

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6203_g12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000087

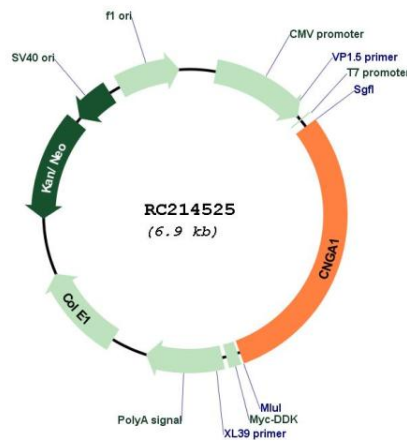
ORF Size: 2070 bp

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](#)

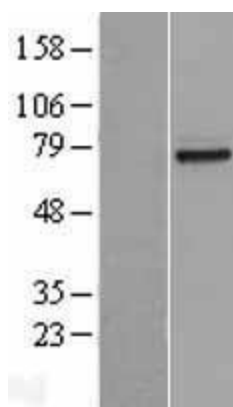
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<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_000087.4
RefSeq Size:	2532 bp
RefSeq ORF:	2061 bp
Locus ID:	1259
UniProt ID:	P29973
Cytogenetics:	4p12
Protein Families:	Druggable Genome, Ion Channels: Cyclic nucleotide gated, Transmembrane
MW:	79.4 kDa
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]

Product images:



Circular map for RC214525



Western blot validation of overexpression lysate (Cat# [LY400028]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214525 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).