

## Product datasheet for **RC221063**

### **CNG3 (CNGA3) (NM\_001298) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	CNG3 (CNGA3) (NM_001298) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CNG3
Synonyms:	ACHM2; CCNC1; CCNCa; CCNCalpha; CNGG3; CNG3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide  
Sequence:

>RC221063 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGCCAAGATCAACACCCAATACTCCCACCCCTCCAGGACCCACCTCAAGGTAAGACCTCAGACCGAG  
ATCTCAATCGCGCTGAAAATGGCCTCAGCAGAGCCCACTCGTCAAGTGAGGAGACATCGTCAGTGTGCA  
GCCGGGATCGCCATGGAGACCAGAGGACTGGCTGACTCCGGGCAGGGCTCCTTACCAGGCCAGGGGATC  
GCCAGGCTGTGCGCCTCATCTTCTGTGCGCAGGTGGGCTGCCAGGCATGTGCACCACCAGGACCAGG  
GACCGGACTCTTTTCTGATCGTTTCCGTGGAGCCGAGCTTAAGGAGGTGCCAGCCAAGAAAGCAATGC  
CCAGGCAAATGTGGCAGCCAGGAGCCAGCAGACAGAGGAGAAGCGCCTGGCCCTGGCCAAATGCAAC  
ACTAACACCAGCAACAACACGGAGGAGGAGAAGAAGACGAAAAGAAGGATGCGATCGTGGTGGACCCGT  
CCAGCAACCTGTACTACCGCTGGCTGACCGCCATCGCCCTGCCTGTCTTATAACTGGTATCTGCTTAT  
TTGACGGGCTGTTTCGATGAGCTGCAGTCCGAGTACCTGATGCTGTGGCTGGTCTGGACTACTCGGCA  
GATGTCCTGTATGCTTGGATGTCTTGTACGAGCTCGGACAGGTTTTCTCGAGCAAGGCTTAATGGTCA  
GTGATACCAACAGGCTGTGGCAGCATTACAAGACGACCACGCAGTTCAAGCTGGATGTGTTGTCCCTGGT  
CCCCACCGACCTGGCTTACTTAAAGGTGGGCACAACTACCCAGAAGTGAGGTTCAACCGCCTACTGAAG  
TTTTCCGGCTCTTTGAATTCTTTGACCGCACAGAGACAAGGACCAACTACCCCAATATGTTTCAGGATTG  
GGAAGTGGTCTTGTACATTCTCATCATCCACTGGAATGCCTGCATCTACTTTGCCATTTCCAAGTT  
CATTGGTTTTGGACAGACTCCTGGGTCTACCCAAACATCTCAATCCCAGAGCATGGGCGCCTCTCCAGG  
AAGTACATTTACAGTCTCTACTGGTCCACCTTGACCCCTACCACCATTGGTGAGACCCACCCCGTGA  
AAGTAGGAGTATCTCTTTGTGGTCTGAGACTTCTTGGTGGTGTCTGATTTTTGCCACCATTGTGGG  
CAATGTGGGCTCCATGATCTCGAATATGAATGCCTCACGGGCAGAGTTCCAGGCCAAGATTGATTCATC  
AAGCAGTACATGCAGTTCGCAAGGTACCAAGGACTTGGAGACGCGGGTTATCCGGTGGTTTACTACC  
TGTGGGCAACAAGAAGACGGTGGATGAGAAGGAGGTGCTCAAGAGCCTCCAGACAAGCTGAAGGCTGA  
GATCGCCATCAACGTGCACCTGGACACGCTGAAGAAGGTTTCGATCTTCCAGGACTGTGAGGCAGGGCTG  
CTGGTGGAGCTGGTGTGAAGCTGCGACCCACTGTGTTCCAGCCCTGGGGATTATATCTGCAAGAAGGGAG  
ATATTGGGAAGGAGATGTACATCATCAACGAGGGCAAGCTGGCCGTGGTGGCTGATGATGGGGTCAACCA  
GTTCTGTTGCTCAGCGATGGCAGCTACTTCGGGGAGATCAGCATTCTGAACATCAAGGGGAGCAAGTCC  
GGGAACCGCAGGACGGCCAACATCCGCAGCATTGGCTACTCAGACCTGTTCTGCCTCTCAAAGGACGATC  
TCATGGAGGCCCTCACCGAGTACCCGAAGCCAAGAAGGCCCTGGAGGAGAAAGGACGGCAGATCCTGAT  
GAAAGACAACCTGATCGATGAGGAGCTGGCCAGGGCGGGCGGACCCCAAGGACCTTGAGGAGAAAGTG  
GAGCAGCTGGGGTCTCCCTGGACACCCTGCAGACCAGGTTTGCACGCCTCCTGGCTGAGTACAACGCCA  
CCCAGATGAAGATGAAGCAGCGTCTCAGCCAATGGAAAGCCAGGTGAAGGGTGGTGGGGACAAGCCCT  
GGCTGATGGGGAAGTTCCCGGGGATGCTACAAAAACAGAGGACAAACAACAG

ACGCGTACGCGGGCCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC221063 protein sequence  
Red=Cloning site Green=Tags(s)

MAKINTQYSHPSRTHLKVKTSRDLNRAENGLSRAHSSSEETSSVLQPGIAMETRGLADSGQGSFTGQGI  
 ARLSRLIFLLRRWAARHVHHQDQGPDSFPDRFRGAELKEVSSQESNAQANVGSQEPADRGRSAWPLAKCN  
 TNTSNTEEEKTKKKDAIVVDPSSNLYYRWLTAIALPVFYNWYLLICRACFDELQSEYLMWLVLVDYSA  
 DVLVYLDVLRARTGFLEQGLMVSNTNRLWQHYKTTTQFKLDVLSLVPTDLAYLKVGTNYPEVFRNLLK  
 FSRLFEEFDRTETRTNYPNMFRIENLVLYLIIHWNACIYFAISKFIGFTDSWYYPNISIPHEGRLSR  
 KYIYSLYWSTLTLTTIGETPPPVKDEEYLFVVVDFLVGLIFATIVGNVGSMSNMNASRAEFQAKIDSI  
 KQYMQFRKVTKDLETRVIRWFDYLWANKKTVDKEVLSLDPKLAIEIAINVHLDLTKKVRIFQDCEAGL  
 LVELVLKLRPTVSPGDYICKKGDIGKEMYINEGKLAVVADDGVTQFVVLSDGSYFGEISILNIKGSKS  
 GNRRTANIRSIGYSDLFCLSKDDLMEALTEYPEAKKALEEKGRQILMKDNLIDEELARAGADPKDLEEKV  
 EQLGSSLDLQTRFARLLAEYNATQMKMKQRLSQLESQVKGGGDKPLADGEVPGDATKTEDKQQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6714\\_c11.zip](https://cdn.origene.com/chromatograms/mk6714_c11.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001298

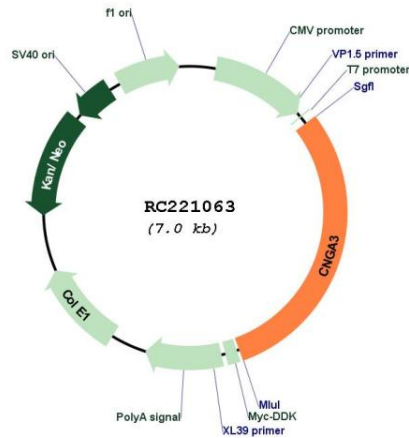
**ORF Size:** 2082 bp

**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](#)

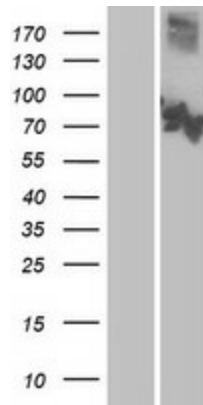
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001298.3</a>
<b>RefSeq Size:</b>	3848 bp
<b>RefSeq ORF:</b>	2085 bp
<b>Locus ID:</b>	1261
<b>UniProt ID:</b>	<a href="#">Q16281</a>
<b>Cytogenetics:</b>	2q11.2
<b>Domains:</b>	cNMP, ion_trans
<b>Protein Families:</b>	Druggable Genome, Ion Channels: Cyclic nucleotide gated, Transmembrane
<b>Protein Pathways:</b>	Olfactory transduction
<b>MW:</b>	78.8 kDa
<b>Gene Summary:</b>	This gene encodes a member of the cyclic nucleotide-gated cation channel protein family which is required for normal vision and olfactory signal transduction. Mutations in this gene are associated with achromatopsia (rod monochromacy) and color blindness. Two alternatively spliced transcripts encoding different isoforms have been described. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC221063



Western blot validation of overexpression lysate (Cat# [LY420024]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221063 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).