

Product datasheet for **MR230834**

Cnga3 (NM_001282010) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cnga3 (NM_001282010) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cnga3
Synonyms:	CNG3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>MR230834 representing NM_001282010
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCAAAGTGAAACCCAGTGTTCACAGCCCTCCCGACCCAACCTTCAATAAAGAATGCGGACAGAG
 ATCTCGACCACGTAGAGAACGGCCTGGGCAGGTCTCACTCACCATGTGAGGAGACATCTCCACACTGCA
 GCAAGGGATCGCCATGGAGACCCGAGGACTGGCTGGATCCGCACGGAGCGTAGTACAAGCCAGGGACCA
 GCCAGGGTGTACGCCTCATCTCGATTCTGCGTGGGCTCCAGGCACTTACACGATGAAGACCAGA
 CACCTGACTCCTTTTGGATCGATTTTCATGGATCTGAGCTTAAGGAAGTCTCCACCCGGAAAGCAATGC
 CCAGCCCAACCCAGGAGAACAGAAGCCACCAGACGGAGGGGAAGGCAGGAAGGAGGAGCCATTGTGGTG
 GACCCCTCCAGCAACATCTACTACCGTGGCTGACTGCCATCGCGCTCCAGTCTTCTATAACTGGTGTC
 TACTTGTATGCAGGGCCTGTTTTGATGAGCTACAATCAGAGCACCTGACGCTGTGGCTGGTCTTGGACTA
 CTCTGCAGATGTCCTTTATGTTTTAGACATGCTGGTTCGAGCCCGGACAGTTTTCTTGAGCAAGGCCTA
 ATGGTCAGAGATACCAAGAGGCTGTGAAACATTACACAAGACCTTGCACCTTCAAGCTGGACATCCTGT
 CTCTCATCCCCACAGACCTGGCTTATTTAAAGTTGGGCGTGAACCTACCCAGAAGTGAAGTTCAACCGCT
 CCTGAAGTTCTCTCGGCTCTTTGAATTCTTTGACCGCACAGAGACAAGGACCAACTACCCCAACGTGTTT
 AGGATAGGGAAGTGGTCTTTACACACTCATCATCCACTGGAATGCCTGCATCTACTTTGCCATTT
 CCAAGTTCATTGGTTTTGGGACAGACTCCTGGGTCTATCCAAACCTCCAAGCCGGAGTATGCACGACT
 CTCCCGGAAGTACATTTACAGTCTCTACTGGTCCACCTGACCTGACCACCTGGTGGAGCCCAACCC
 CCCGTGAAAGATGAAGAGTATCTCTTTGGTCTCGACTTCTGGTGGGTATCCTGATCTTTGCCACCA
 TAGTGGGCAACGTAGGCTCCATGATTTCCAACATGAACGCTCCCGGGTAGAGTCCAGGCTAAGATCGA
 CTCCGTCAAGCAGTACATGCAGTTCGGGAAGGTAAACCAAGGACTTGGAGACTCGGGTTATCCGGTGGTTT
 GACTATCTGTGGGCAACAGGAAGACGGTGGATGAAAAGGAAGTCTCAAAAACCTCCCGGACAAGCTGA
 AGGCTGAGATCGCCATCAACGTGCACCTGGACACGCTGAAGAAGGTCCGAATCTCCAGGACTGCGAGGC
 GGGGCTGCTGGTGGAGCTGGTGTGAAGCTCCGCCCACTGTGTTGAGCCCGGGGACTACATATGCAAA
 AAGGGGGACATTGGAAGAGAGATGTACATCAAGGAGGGCAAGCTGGCTGTGGTGGCTGATGACGGGG
 TCACCCAGTTTGGTCTCAGTGACGGCAGTTACTTTGGGGAGATTAGCATCTTAACATTAAGGGGAG
 CAAGTCTGGGAACCGCAGGACGGCCAACATCAGGAGTATCGGCTACTCAGACCTGTTCTGCCTCTCCAAG
 GATGACCTAATGGAAGCCCTCACCGAGTACCCAGACGCTAAGAGGGCTCTGGAGGAAAAGGGCCGTCAGA
 TTCTGATGAAGGACAACCTAATTGATGAGGACCTAGTCGCGGCCAGGGTATACAGGGACGTTGAGGA
 GAAGGTGGAGTACCTGGAGTCGTCCTGGACATCCTGCAGACGAGGTTTGCCCGACTCCTGGCTGAGTAC
 AGTGCCTCCAGATGAAGCTGAAACAGCGGCTCACTCGGCTGGAGAGCCAGATGAACAGGAGGTGTTGTG
 GCTTCTCACCTGACAGGGAGAATCCGAGGATGCTTCAAAGACTGAC

ACGCGTACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR230834 representing NM_001282010
Red=Cloning site Green=Tags(s)

MAKVNTQCSQPSPTQLSIKNADRDLDHVENGLGRSHSPCEETSSTLQQGIAMETRGLAGSARSVVTSSQGP
 ARVSRLIISIRAWASRHLHDEDQTPDSFLDRFHGSELKEVSTRESNAQPNPGEQKPPDGGEGRKEEPIVV
 DPSSNIYYRWLTAIALPVFYNWCLLVCRACFDELQSEHLTLWLVDYSADVLVYLDMLVRARTGFLEQGL
 MVRDTRKRLWKHYTKLHFKLDILSLIPTDLAYLKLGVNYPELRFNRLKFSRLFEFFDRTETRTNYPNVF
 RIGNLVLYTLIIHWNACIYFAISKFIGFGTDSWYYPNTSKPEYARLSRKYIYSLYWSTLTLTTIGETPP
 PVKDEEYLVVVIDFLVGLIFATIVGNVGMISNMNAPRVEFQAKIDSVKQYMQFRKVTKDLETRVIRWF
 DYLVANRKTVDEKEVLKNDPKLKAIEIAINVHLDLTKKVRIFQDCEAGLLVELVLKLRPTVFSFGDYICK
 KGDIGREMYIIKEGLAVVADDGVTQFVVLSDGSYFGEISILNIKSGKSGNRRTANIRSIGYSDLFCLSK
 DDLMEALTEYPDRAKRALEEGRQILMKDNLIDEDLVAARVDTRDVEEKVEYLESSLDILQTRFARLLAEY
 SASQMKLKQRLTRLESQMNRRCCGFS PDRENSEDASKTD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_001282010

ORF Size: 2007 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:

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_001282010.1](#), [NP_001268939.1](#)

RefSeq Size: 3623 bp

RefSeq ORF: 2010 bp

Locus ID: 12790

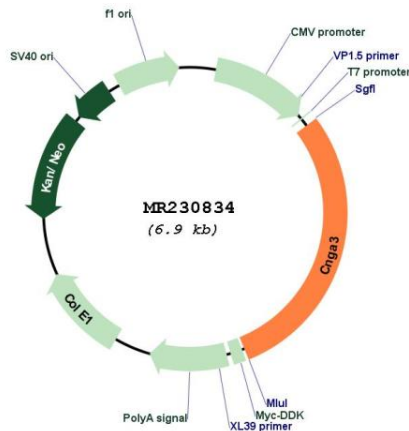
UniProt ID: [Q9JJZ8](#)

Cytogenetics: 1 B

MW: 76.6 kDa

Gene Summary: Visual signal transduction is mediated by a G-protein coupled cascade using cGMP as second messenger. This protein can be activated by cyclic GMP which leads to an opening of the cation channel and thereby causing a depolarization of cone photoreceptors. Essential for the generation of light-evoked electrical responses in the red-, green- and blue sensitive cones (By similarity). Induced a flickering channel gating, weakened the outward rectification in the presence of extracellular calcium, increased sensitivity for L-cis diltiazem and enhanced the cAMP efficacy of the channel when coexpressed with CNGB3.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR230834