

## Product datasheet for **MG225139**

### **Cnga4 (NM\_001033317) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Cnga4 (NM_001033317) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cnga4
Synonyms:	MGC130316
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG225139 representing NM\_001033317  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGAGCCAGGACAGCAAAGTGAAGACAACAGAGTCCACGCCCCAGCCCCAACCAAAGCCAGGAAGTGGC  
 TGCCAGTCTAGACCCATCTGGGATTATTACTACTGGTGGCTGAACACGATGGTCTTCCAATCATGTA  
 TAATCTCATCATCGTTGTATGCAGGGCCTGCTTTCCTGACTTGCAACACAGTTACCTGGTGGCCTGGTTT  
 GTGCTGGACTACAGAGTGACCTGCTGTACCTACTAGATATTGGGGTACGCTTCCACACAGGATTCTAG  
 AACAGGGCATCTGGTGGTAGACAAAAGCATGATCGCCAGTCGCTATGTACGCACCTGGAGCTTCTCTGT  
 GGACCTGGCTTCCCTGGTCCCCACAGATGCAGCCTACGTGCAGCTAGGCCCCACATCCCTACACTCCGG  
 CTA AACCGCTTCTCCGAGTGCCTCGCCTCTTTGAGGCTTTCGACCGTACAGAGACCCGCACAGCTTACC  
 CAAATGCCTTCCGCATAGCCAAGCTGATGATCTACATTTTGTGTCATCCATTGGAACAGCTGCTTATA  
 CTTTCGCCCTGTCCAGTACCTGGGCTTCGGACGGGATGCATGGGTATACCCAGACCCTGCGCAGCCTGGC  
 TTTGAGCGCTTGGCGGCCAGTATCTCTACAGCTTCTACTTCTCCACTCTGATCCTGACCACTGTGGGTG  
 ACACACCCTGCCAGCCGAGAGGAAGAGTACCTCTTATGGTGGTGGTACTTCTGCTGGCCGTCATGGG  
 TTTCCGCCACCATCATGGGTAGCATGAGCTCTGTCAATTTACAACATGAACACGGCAGATGCAGCCTTCTAC  
 CCAGACCATGCTCTGGTAAAGAAATACATGAAGCTACAGCACGTCAACCGAAGGCTGGAGCGGCCGCTTA  
 TTGACTGGTACCAGCATCTGCAGATCAACAAGAAGATGACCAATGAGGTAGCCATCTTGCAGCACTTGGC  
 TGAGCGGCTGCGGCAGAGGTGCTGTATCCGTACACCTGTCTACCCTGAGCCGAGTACAGATCTCCAG  
 AACTGTGAAGCCAGCCTGCTGGAAGAGCTGGTGTCTAAAGCTCCAGCCCCAGACCTACTCACCAGGCCAAT  
 ACGTATGCCGCAAAGGGGACATTGGCCGAGAGATGTACATCATCCGCGAGGGCCAGCTGGCTGGTGGC  
 AGATGACGGTGTACACAGTATGCTGTGCTTGGTGCAGGCTCTACTTTGGGGAGATTAGCATCATCAAC  
 ATCAAAGGGAACATGTCTGGAACCCGACGAACAGCTAACATCAAGAGCCTGGGCTATTACAGCCTTCTCT  
 GCCTCAGCAAGGAGGATCTACGGGAGGTGCTGAGTGAGTACCCACAGGCCAGGCAGTATGGAGGAGAA  
 GGGCCGTGAAATCTTGTCTCAAAATGAATAAATTGGATGTGAATGCTGAGGCAGCTGAGATCGCCCTCCAG  
 GAGGCCACAGAGTCTCGGCTGAAAGCCTCGACCAGCAGCTTGTGACCTACAGACCAAGTTTGTCTCGCC  
 TCCTGGCTGAGCTGGAGTCCAGCGCACTGAAGTAGCTTACCGCATTGAAAGGCTGGAGTGGCAGACTCG  
 AGAGTGGCCGATGCCAGACGACATGGGTGAGGCTGATGATGAGGCTGAGCCTGGAGAAGGAACGTCCAAG  
 GATGGAGAGGAAAAGCTGGCCAGGAGGACCCTCAGGCCTAGAA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>MG225139 representing NM\_001033317  
 Red=Cloning site Green=Tags(s)

MSQDSKVKTTSTPPAPTKARKWLPVLDPSGDYIYWLNMTMVFPIIMYNLIIVVCRACFPDLQHSYLVAWF  
 VLDYTSDLLYLDDIGVRFHTGFLEQGIIVVDKSMIASRYVRTWSFLLDLASLVPTDAAYVQLGPHIPTLR  
 LNRFLRPRLFEAFDRTETRTAYPNAFRIAKLMIYIFVVIHWNLSLYFALSRYLGFGRDAWVYPPDPAQPG  
 FERLRRQYLYSFYFSTLILTTVGDTPLPAREEYLFMVGDFLLAVMGFATIMGSMSSVIYNMNTADAAFY  
 PDHALVKKYMKLQHVNRRLERRVIDWYQHLQINKKMTNEVAILQHLPERLRAEVAVSVHLSTLSRVQIFQ  
 NCEASLLEELVLKLPQTYSPGEYVCRKGDIGREMYIIREGQLAVVADDGVTQYAVLGAGLYFGEISIIIN  
 IKGNMNGNRRTANIKSLGYSDLFCLSKEDLREVLSEYPQAQAVMEEKGREILLKMNKLDVNAEAEIALQ  
 EATESRLKGLDQQLDDLQTKFARLLAELESSALKIAYRIERLEWQTREWPMPDDMGEADDEAEPGEGTSK  
 DGEEKAGQEGPSGLE

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-MluI



<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	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_001033317.3</a> , <a href="#">NP_001028489.1</a>
<b>RefSeq Size:</b>	2480 bp
<b>RefSeq ORF:</b>	1728 bp
<b>Locus ID:</b>	233649
<b>UniProt ID:</b>	<a href="#">Q3UW12</a>
<b>Cytogenetics:</b>	7 E3
<b>Gene Summary:</b>	Second messenger, cAMP, causes the opening of cation-selective cyclic nucleotide-gated (CNG) channels and depolarization of the neuron (olfactory sensory neurons, OSNs). CNGA4 is the modulatory subunit of this channel which is known to play a central role in the transduction of odorant signals and subsequent adaptation. By accelerating the calcium-mediated negative feedback in olfactory signaling it allows rapid adaptation to odor stimulation and extends its range of odor detection.[UniProtKB/Swiss-Prot Function]