

## Product datasheet for **MG202081**

### Guca1a (NM\_008189) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Guca1a (NM\_008189) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Guca1a  
**Synonyms:** GC-A; Gcap1; Guca; Guca1; mGCA; mGCAP1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG202081 representing NM\_008189  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGCAACATCATGGAGGGCAAGTCCGTGGAAGAGCTGAGCAGCACCGAGTGCCATCAGTGGTATAAGA  
AATTTATGACGGAGTGCCCATCTGGCCAGCTCACCTCTACGAATTCGCCAGTTCTTTGGTCTCAAGAA  
CCTGAGCCCTCAGCCAGCCAGTATGTGGAACAGATGTCGAGACCTTTGACTTCAACAAGGATGGCTAC  
ATTGACTTCATGGAGTACGTGGCAGCCCTCAGCCTGGTCTCAAGGGCAAAGTGGAACAGAAGTTGCGCT  
GGTATTTCAAGCTCTACGACGTGACGGCAACGGGTGCATAGACAGGGACGAGCTGCTCACCATCATCCG  
GGCCATCCGAACCATTAATCCCTGGAGCGACTCATCCATGAGTGCCGAGGAATTCACAGATACCGTGTT  
GCCAAGATCGACATCAACGGGGATGGGGAAGTGTCCCTGGAGGAGTTCATGGAAGGTGTGCAGAAGGACC  
AGATGCTCCTGGACACGCTGACCCGAAGCCTGGACTTGACCGGCATCGTGCGCAGACTCCAGAACGGCGA  
ACACGAGGAGGCAGGCACCGCGACCTGGCAGCGGAGGCTGCGGGT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG202081 representing NM\_008189  
Red=Cloning site Green=Tags(s)

MGNIMEGKSVEELSSTECHQWYKFMTECPGQLTLYEFRQFFGLKNLSPSASQYVEQMFETDFDNKDG  
IDFMEYVAALSLVLKKGVEQKLRWYFKLYDVGNGCIDRDELLIIRAIRTINPWSDSMSAEFTDVT  
AKIDINGDGELSLEEFMEGVQKQMLLDLTLTRSLDLTGIVRRLQNGEHEEAGTGDLAEEAAG

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI

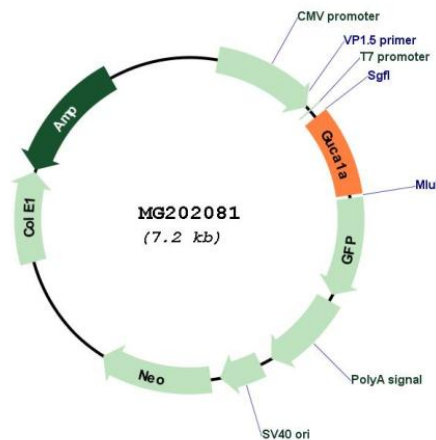


[View online »](#)

Cloning Scheme:



Plasmid Map:



ACCN: NM\_008189

ORF Size: 606 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\\_008189.3](#)

**RefSeq Size:** 917 bp

**RefSeq ORF:** 609 bp

**Locus ID:** 14913

**UniProt ID:** [P43081](#)

**Cytogenetics:** 17 C

**Gene Summary:** This gene encodes a calcium-binding photoreceptor protein. The encoded protein may be involved in modulation of guanylyl cyclase activity, and in turn, the mammalian cone phototransduction cascade. Disruption of this gene results in the retinal degeneration associated with cone dystrophy. [provided by RefSeq, Dec 2015]