

Product datasheet for **MG224986**

Gucy2e (NM_008192) Mouse Tagged ORF Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | Gucy2e (NM_008192) Mouse Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | Gucy2e |
| Synonyms: | GC-E; GC1; ROS-GC1 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |
| ORF Nucleotide Sequence: | >MG224986 representing NM_008192 Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGCGCTTGGCTCCTGCCAGCCGGAGGGCTCCCGGCCCGGGTTCTGTGTCCCTGCCGGCAGTCTC
CGTCCAGTTTCTCGCGGGTCTGCGCTGGCCAAGGCTGGGCTACCGGGACTCCTGCTACTGCTACTGCT
CCCATCTCCTTCTGCCCTCTCTGCTGTGTTCAAAGTGGGGTGTGGGCCCTGGCTTGCACCCCATC
TTTGCACGGGCCGACCAGACCTGGCTGCGCTGTGGCCCAACCGCTGAATCGTGACTTTGCTTTAG
ACGGCGGCCCGGTTTCGAGGTTGCGCTGCTCCAGAGCCCTGCCTGACTCCGGGCTCACTAGGGGCTGT
GTCTCTGCGCTGTCTCGAGTCTCTGGCTGGTGGGTCCGGTGAACCCCGCAGCCTGTCCGCCAGCCGAA
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GGCCCTGATCACTGCACCCCAAGACCTGTGGGTGGAGGCGGGACGCGCTCTGTCCACAGCACTCAGGGCC
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CACCTGTAGATCCTGTCTTAGGCTCCCTGCGTTCTGCAGGGACCCCATGCACTCCCTAGAGGTGGAC
CTGCCCGGGACCAGACCCTTCTGCTGGTTCGATCCAGATGTGATCTGCAACGGAGGGGTGGAGCCAGG
CCTGGTCTTTGTTGGCTCCTCCTGGTATAGGATGGGACTGACTGGAGCCTTCTGGCTACTACTTG



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AGGCACAGGCTGCTACACATGCAGATGGCTTCCGGCCCCAACAGATCATCTTGACGTTGGAAGATGTTA
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GGAGAAAGCCAGGCCAGGCCAGTTACTGGGAAG
    
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG224986 representing NM_008192
 Red=Cloning site Green=Tags(s)

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MSAWLLPAGGLPGAGFCVPAQSPSSFSRVLRWPRPGLPGLLLLLLLPSPSALS AVFKVGVLPWACDPI
FARARPDLAARLAANRLNRDFALDGGPRFEVALLPEPCLTPGSLGAVSSALSRVSLVGPVNPAAACRPAE
LLAQEAGVALVPWGCPGTRAAGTTAPAVTPAADALYVLLRAFRWARVALITAPQDLWVEAGRALSTALRA
RGLPVALVTSMETSDRSGAREALGRIRDGPRVRVIMVMHVSLLGGEEQRYLLEAAEELALTDGSLVFLP
FDTLHYALSPGPEALAAFVNSSQLRRAHDAVLTLTRCPPGGSVQDSLRAAQEHQELPLDLNLKQVSPLF
GTIYDAVFLLAGVYKRARTAVGGGWVSGASVARQVREAVQVSGFCGVLGRTEEPSFVLLDTSASGEQLFAT
HLLDPVLGSLRSAGTPMHFPRGGPAPGPDPSWFDPDVICNGGVEPGLVFGVFLLVIGMGLTGAFLAHYL
RHRLMHMQMASGPNKIILTLEDVTFHPPGGSSRKVVQGSRSSLATRSASDIRSVSPQPQESTNVGLYEG
DWWLKKFPGEHMAIRPATKTAFAFKLREL RHENVALYGLFLAGTADSPATPGEGLAVVSEHCARGSL
HDLLAQREIKLDWMFKSSLLDLIKGMYLHHRGVAHGRLKSRNCVVDGRFVLKVDHGHGRLLEAQRVL
PEPPSAEDQLWTAPELLRDP SLERRGTLAGDVFSLAII MQEVVCRSTPYAMLELTPEEVIQRVRSPPPLC
RPLVSMDAQMECIQLMTQCWAHEPELRPSMDLTFDLFKSINKGRKTNIIDSMLRMLEQYSSNLEDLIRE
RTEELEQEKQKTDRLLTQMLPPSVAEALKMGT SVEPEYFEEVTL YFSDIVGFTTISAMSEPIEVVDLLND
LYTLFDAIIGAHDVYK VETIGDAYMVASGLPQRNGQRHAAEIANMSLDILSAVGSFRMRHMEVVPVIRI
GLHSGPCVAGVGLTMPRYCLFGDVTNTASRMESTGLPYRIHVNMSTVIRILRALDQGFQMECRGRTELKG
KGIEDTYWLVGRLGFNKP IPKPPDLQPGASNHGISLQEIPERRKKLEKARPGQFTGK
    
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TRTRPLE - GFP Tag - V

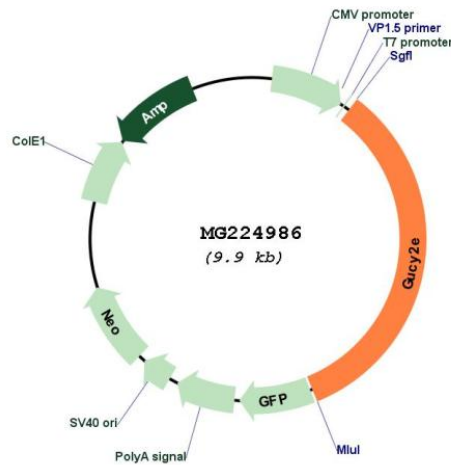
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_008192

ORF Size: 3324 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.

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| 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: | <u>NM_008192.3</u> , <u>NP_032218.2</u> |
| RefSeq Size: | 8331 bp |
| RefSeq ORF: | 3327 bp |
| Locus ID: | 14919 |
| UniProt ID: | <u>P52785</u> |
| Cytogenetics: | 11 42.51 cM |
| Gene Summary: | Catalyzes the synthesis of cyclic GMP (cGMP) in rods and cones of photoreceptors. Plays an essential role in phototransduction, by mediating cGMP replenishment (PubMed:21598940). May also participate in the trafficking of membrane-associated proteins to the photoreceptor outer segment membrane (PubMed:17255100).[UniProtKB/Swiss-Prot Function] |