

Product datasheet for MR224986

Gucy2e (NM_008192) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gucy2e (NM_008192) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gucy2e
Synonyms:	GC-E; GC1; ROS-GC1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR224986 representing NM_008192 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGCGCTTGGCTCCTGCCAGCCGGAGGGCTCCCGGCCCGGGTTCTGTGTCCCTGCGCGGCAGTCTC
CGTCCAGTTTCTCGCGGGTCTGCGCTGGCCAAGGCTGGGCTACCGGGACTCCTGCTACTGCTACTGCT
CCCATCTCCTTCTGCCCTCTCTGCTGTGTTCAAAGTGGGGTGTGGGCCCTGGCTTGCACCCCATC
TTTGCACGGGCCGACCAGACCTGGCTGCGCTGTGGCCCAACCGCTGAATCGTGACTTTGCTTTAG
ACGGCGGCCCGGTTTCGAGGTTGCGCTGCTCCAGAGCCCTGCCTGACTCCGGGCTCACTAGGGGCTGT
GTCTCTGCGCTGTCTCGAGTCTCTGGCTGGTGGGTCCGGTGAACCCCGCAGCCTGTCCGCCAGCCGAA
CTGTTGGCTCAAGAAGCTGGAGTAGCGTGGTGCCTGGGGTGCCTGGCACGCGGGCGCGGGTACTA
CAGCCCCGGCGGTGACCCCCGCTGCAGATGCTCTCTACGTCTCCTTAGAGCATTCCGCTGGGCGCGCT
GGCCCTGATCACTGCACCCCAAGACCTGTGGGTGGAGGCGGGACGCGCTCTGTCCACAGCACTCAGGGCC
CGGGGTTTGCCAGTTGCCCTAGTGACTTCCATGGAGACTTCAAGCCGCTGGAGCCCGGGAGGCCCTCG
GGAGGATCCGAGATGGCCTAGAGTTAGAGTAGTGATCATGGTATGACTCGGTGCTGCTGGGCGGCGA
GGAGCAGCGCTACCTACTGGAAGCTGCAGAAGAACTGGCTCTGACTGATGGCTCCCTGGTTTTCTGCC
TTCGACACGCTTCACTACGCTTTGTCTCCAGGCCCGGAGGCTCTGGCTGCATTTGTCAACAGCTCCAGC
TCCGACGGGCTCACGATGCGGTGCTCACACTCACGCGCCGCTGTCTCCTGGAGGACGCTGCAAGACAG
CCTGCGCAGGGCTCAAGAACACCAGGAAGTGCCTTGCCTCAACCTGAAGCAGGTCTCTCCGCTGTTT
GGCACCATCTATGATGCTGTCTTCTGTTGGTGGGGCGTGAAGAGAGCAAGAACAGCGGTGGTGGTG
GCTGGGTGTCAGGTGCATCTGTAGCCCGCAAGTACGGGAAGCACAAGTCTCTGGCTTTTGTGGGTCT
GGGAAGAACCAGGAGCCCTCCTTGTGCTGCTGGACACAGATGCATCCGGAGAACAGTTGTTCCGAACA
CACCTGCTAGATCCTGTCTTAGGCTCCCTGCGTTCTGCAGGGACCCCATGCACTCCCTAGAGGTGGAC
CTGCCCGGGACCAGACCCTTCTGCTGGTTCGATCCAGATGTGATCTGCAACGGAGGGGTGGAGCCAGG
CCTGGTCTTTGTTGGCTCCTCCTGGTATAGGATGGGACTGACTGGAGCCTTCTGGCTACTACTTG



[View online >](#)

AGGCACAGGCTGCTACACATGCAGATGGCTTCCGGCCCCAACAGATCATCTTGACGTTGGAAGATGTTA
 CTTTCTCCACCCACCGGAGGCAGCTCTCGAAAGGTGGTCCAGGGAAGTAGATCCAGTCTGGTACCCG
 GAGCGCATCAGACATTCGAGTGTCCCCAGCCAGCCCCAAGAGAGCACCACGTTGGCCTCTATGAGGGG
 GACTGGGTTTGGCTGAAGAAGTCCCAGGGGAACATCATATGGCTATCAGGCCAGCAACAAAGACAGCT
 TCTCCAAGCTTCGAGAGCTCCGGCATGAGAATGTGGCTCTCTACTTGGGACTCTTCTGGCGGGTACAGC
 AGACAGCCCTGCCACCCCTGGGAGGGCATCTTGGCTGTGGTCTCAGAGCACTGTGCTCGGGGTTCCCTC
 CATGACTCTTGGCCCAGAGAGAAATAAAGCTGGACTGGATGTTCAAGTCTTCCCTCTGGACTGCCTCA
 TCAAGGGAATGAGATATCTGCACCATCGCGGTGTGGCCACGGGAGGCTCAAGTACGGAATTGCGTGGT
 GGACGGGAGGTTCTGTCTCAAGGTGACAGATCATGGCCATGGGGACTGTGGAAGCGCAAAGGGTGTTA
 CCGGAACCTCCCAGTGCAGAGGATCAGCTATGGACAGCCCCAGAGCTTCTTGGGACCCCTCCCTGGAGC
 GCCGGGAACTCTAGCTGGTGTGTCTTTAGTCTGGCCATCATATGCAGGAGGTCGTGTGCCGACGAC
 CCCTTATGCCATGCTGGAATAACGCCGAGGAAGTAATACAGAGGTCGGGAGCCCTCTCCACTGTGT
 CGGCCCTTGGTGTCCATGGACCAGGCACCCATGGAGTGCATCCAGCTGATGACACAATGTGGGCAGAGC
 ATCCAGAACTTCGGCCTCCATGGACCTCACCTTTGACCTGTTCAAGAGCATCAACAAGGCCGGAAGAC
 CAACATCATCGACTCCATGCTTCGGATGCTGGAGCAGTACTCTAGTAACCTGGAGGATCTGATCCGAGAA
 CGCACAGAGGAGTTAGAGCAGGAGAAGCAGAAGACAGACAGGCTGCTCACACAGATGCTGCCTCCATCTG
 TGGCTGAGGCCCTGAAGATGGGGACATCTGTGGAGCCTGAGTACTTTGAAGAGGTGACACTCTACTTCAG
 TGACATCGTGGGCTTTACCACCATTTACGCCATGAGCGAGCCTATTGAGGTGGTAGACCTGCTTAATGAC
 CTCTATACTCTTTCGATGCCATCATCGGTGCCATGATGTCTATAAGGTGGAACAATTGGAGATGCAT
 ATATGGTGGCCTCCGGCTGCCGAGAGAACGGGACGGCAGCCTGCAGAGATTGCCAACATGCACT
 GGACATCTCAGTGCAGTCGGCTCCTCCGCATGCGCCATATGCCGAGGTACCGGTGCGCATCCGCATT
 GGTTTGCACCTCAGGCCGTCGCTGGCGGGTGTGGTGGCCCTCACCATGCCTCGTACTGCCTGTTCCGGG
 ACACGGTCAACACTGCCCTGAGAATGGAGTCCACTGGACTGCCTTACCGCATCCAGTAAACATGAGCAG
 TGTTCCGATTCTTCGCGCTCTGGACCAAGGCTTCCAGATGGAGTGTGAGGCGCCACGGAGCTGAAGGGC
 AAGGGTATTGAGGACACGTACTGGCTTGTGGGAGACTTGGCTTCAACAAGCCATTCCCAAACCTG
 ATCTGCAGCCAGGGGCCAGCAACCATGGTATCAGCCTGCAGGAGATTCCCCAGAGAGACGAAGAAGCT
 GGAGAAAGCCAGGCCAGGCCAGTTACTGGGAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR224986 representing NM_008192
 Red=Cloning site Green=Tags(s)

MSAWLLPAGLPGAGFCVPAQSPSSFSRVLWRPRLPGLLLLLLLPSPSALSAVFKVGVLPWACDPI
 FARARPDLAARLANRLNRDFALDGGPRFEVALLPEPCLTPGSLGAVSSALSRVSLVGPVNPAAACRPAE
 LLAQEAGVALVPWGPCGTRAAGTTAPAVTPAADALYVLLRAFRWARVALITAPQDLWVEAGRALSTALRA
 RGLPVALVTSMETSDRSGAREALGRIRDGPRVRVIMVMHVSLLGGEEQRYLLEAAEELALTDGSLVFLP
 FDTLHYALSPGPEALAAFVNSSQLRRAHDAVLTLRRCPPGGSVQDSLRRAQEHQELPLDLNLKQVSPLF
 GTIYDAVFLLAGVYKRRARTAVGGWVSGASVARQVREAVQVSGFCGVLGRTEEPSFVLLDTSASGEQLFAT
 HLLDPVLGSLRSAGTPMHFPRGGPAPGDPSCWFDPDVICNGGVEPGLVFGVLLVIGMGLTGAFLAHL
 RHRLHMQMASGPNKIIITLEDVTFHPPGGSSRKVVQGSRSSLATRSASDIRSVSPQPQESTNVGLYEG
 DWWWLKKFPGEHMAIRPATKTAFAFKLRELHENVLYLGLFLAGTADSPATPGEGLAVVSEHCARGSL
 HDLLAQREIKLDWMFKSLLLDLIGMRYLHHRGVAHGRLKSRNCVVDGRFVVKVTDHGHRLLEAQRVL
 PEPPSAEDQLWTAPELLRDPSELRRTLAGDVFSLAIIIMQEVVCRSTPYAMELTPEEVIQVRVSPPLC
 RPLVSMQAPMECIQLMTQCWAEHPERLPSMDLTFDLFKSINKGRKTNIIDSMRLMEQYSSNLEDLIRE
 RTELEQEKQKTDRLLTQMLPPSVAEALKMGTSVEPEYFEEVTLVSDIVGFTTISAMSEPIEVVDLLND
 LYTLFDAIIGAHDVYKIVETIGDAYMVASGLPQRNGQRHAEIANMSLDILSAVGSFRMRHMPVPRIRI
 GLHSGPCVAGVVGLTMPRYCLFGDVTNTASRMESTGLPYRIHVMSTVIRLALDQGFQMECRGRTELK
 KGIEDTYWLVGRLGFNKP I P K P P D L Q P G A S N H G I S L Q E I P P E R R K K L E K A R P G Q F T G K

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9002_b12.zip
Restriction Sites: SgfI-MluI
Cloning Scheme:



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.

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_008192.3](#), [NP_032218.2](#)

RefSeq Size: 8331 bp

RefSeq ORF: 3327 bp

Locus ID: 14919

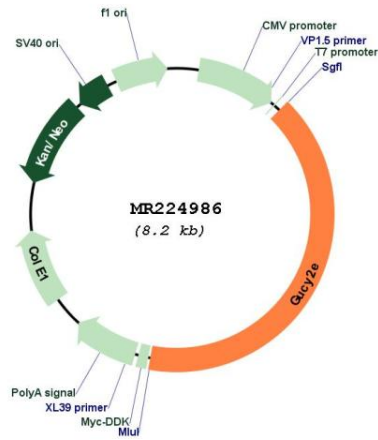
UniProt ID: [P52785](#)

Cytogenetics: 11 42.51 cM

MW: 121.1 kDa

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]

Product images:



Circular map for MR224986