

Product datasheet for MC223587

Gucy2e (NM_008192) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: GuCy2e (NM_008192) Mouse Untagged Clone
Tag: Tag Free
Symbol: GuCy2e
Synonyms: GC-E; GC1; ROS-GC1
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC223587 representing NM_008192
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGCGCTTGGCTCCTGCCAGCCGGAGGGCTTCCGCGCCGGGTTCTGTGTCCCTGCGCGGCAGTCTC
 CGTCCAGTTTCTCGCGGGTCTGCGCTGGCCAAGCCCTGGGCTACCGGGACTCCTGCTACTGCTACTGCT
 CCCATCTCCTTCTGCCCTCTGCTGTGTTCAAAGTGGGGTGTGGGCCCTGGGCTTGGACCCATC
 TTTGCACGGGCCCGACCAGACCTGGCTGCGCGTCTGGCCGCAACCGCCTGAATCGTGACTTTGCTTTAG
 ACGGCGGGCCCCGGTTCGAGGTTGCGCTGCTCCAGAGCCCTGCCTGACTCCGGGCTCACTAGGGGCTGT
 GTCCTCTGCGCTGCTCGAGTCTCTGGCCTGGTGGGTCCGGTGAACCCCGCAGCCTGTGCGCCAGCCGAA
 CTGTTGGCTCAAGAAGCTGGAGTAGCGTGGTGCCTGGGGTGCCTGGCACGCGGGCGGGGTTACTA
 CAGCCCCGGCGGTGACCCCGCTGCAGATGCTCTCTACGTCCTTAGAGCATTCCGCTGGGCGCGCGT
 GGCCCTGATCACTGCACCCCAAGACCTGTGGGTGGAGGCGGGACGCGCTGTCCACAGCACTCAGGGCC
 CGGGTGGTGGCAGTTGCCCTAGTACTTCCATGGAGACTTCAAGCCGGTCTGGAGCCCGGGAGCCCTCG
 GGAGGATCCGAGATGGGCTAGAGTTAGAGTAGTGATCATGGTGTGACTCGGTGCTGCTGGGCGGCGA
 GGAGCAGCGTACTACTGGAAGCTGCAGAAGAACTGGCTCTGACTGATGGCTCCCTGGTTTTCTGCC
 TTCGACACGCTTCACTACGCTTTGTCTCCAGGCCGGAGGCTCTGGCTGCATTTGTCAACAGCTCCAGC
 TCCGACGGGCTCACGATGCGGTGCTCACACTCACGCGCCGCTGTCTCTGGAGGACGCTGCAAGACAG
 CCTGCGCAGGGCTCAAGAACACCAGGAAGTCCCTTACCTCAACCTGAAGCAGGTCTCTCCGCTGTTT
 GGCACCATCTATGATGCTGTCTTCTGTTGGTGGGGCGTGAAGAGAGCAAGAACAGCGGTGGTGGTG
 GCTGGGTGTCAGGTGCATCTGTAGCCCGCAAGTACGGGAAGCACAAGTCTCTGGCTTTTGTGGGTCT
 GGAAGAACCAGGAGCCCTCCTTTGTGCTGCTGGACACAGATGCATCCGAGAACAGTTGTTCCGAACA
 CACCTGCTAGATCTGTCTTAGGCTCCCTGCGTCTGCAGGGACCCCATGCACTTCCCTAGAGGTGGAC
 CTGCCCCGGGACAGACCTTCTGCTGGTTCGATCCAGATGTGATCTGCAACGGAGGGGTGGAGCCAGG
 CCTGGTCTTTGTTGGCTTCTCCTGGTGATAGGGATGGGACTGACTGGAGCCTTCTGGCTCATTACTTG
 AGGCACAGGCTGCTACACATGCAGATGGCTTCCGGCCCAACAAGATCATCTTGACGTTGGAAGATGTTA



CTTTCCTCCACCCACCGGAGGCAGCTCTCGAAAGGTGGTCCAGGGAAGTAGATCCAGTCTGGCTACCCG
 GAGCGCATCAGACATTCGCAGTGTCCCCAGCCAGCCCCAAGAGAGCACCAACGTTGGCCTCTATGAGGGG
 GACTGGGTTTGGCTGAAGAAGTCCCAGGGGAACATCATATGGCTATCAGGCCAGCAACAAGACAGCCT
 TCTCAAGCTTCGAGAGCTCCGGCATGAGAATGTGGCTCTCTACTTGGGACTCTTCTGGCGGGTACAGC
 AGACAGCCCTGCCACCCCTGGGGAGGCATCTTGGCTGTGGTCTCAGAGCACTGTGCTCGGGTTCCCTC
 CATGACCTCCTGGCCCAGAGAGAAAATAAGCTGGACTGGATGTTCAAGTCTTCCCTCTGCTGGACCTCA
 TCAAGGGAATGAGATATCTGCACCATCGCGGTGTGGCCACGGGAGGCTCAAGTACGGAATTGCGTGGT
 GGACGGGAGGTTCTGTCTCAAGGTGACAGATCATGGCCATGGGGGACTGCTGGAAGCGCAAAGGGTGTTA
 CCGGAACCTCCCAGTGCAGAGGATCAGCTATGGACAGCCCCAGAGCTTCTTCGGGACCCCTCCCTGGAGC
 GCCGGGAACTCTAGCTGGTGTGTCTTTAGTCTGGCCATCATATGCAGGAGGTCGTGTGCCGAGCAC
 CCCTTATGCCATGCTGGAATAACGCCGAGGAAGTAATACAGAGGGTCCGGAGCCCTCCTCCACTGTGT
 CGGCCCTTGGTGTCCATGGACCAGGCACCCATGGAGTGCATCCAGCTGATGACACAATGCTGGGCAGAGC
 ATCCAGAACTTCGGCCTCCATGGACCTCACCTTTGACCTGTTCAAGAGCATCAACAAGGGCCGGAAGAC
 CAACATCATCGACTCCATGCTTCGGATGCTGGAGCAGTACTCTAGTAACCTGGAGGATCTGATCCGAGAA
 CGCACAGAGGAGTTAGAGCAGGAGAAGCAGAAGACAGACAGGCTGCTCACACAGATGCTGCCTCCATCTG
 TGCTGAGGCCCTGAAGATGGGGACATCTGTGGAGCCTGAGTACTTTGAAGAGGTGACACTCTACTTCAG
 TGACATCGTGGGCTTTACCACCATTTACGCCATGAGCGAGCCTATTGAGGTGGTAGACCTGCTTAATGAC
 CTCTATACTCTTTCGATGCCATCATCGGTGCCATGATGTCTATAAGGTGGAACAATTGGAGATGCAT
 ATATGGTGGCCTCCGGGCTGCCGAGAGGAACGGGCAGCGGCACGCTGCAGAGATTGCCAACATGCTACT
 GGACATCCTCAGTGCAGTCGGCTCCTCCGCATGCGCCATATGCCCGAGGTACCGGTGCCATCCGCATT
 GGTTTGCAGTCAAGCCCGTGGTGGCGGGTGTGGTGGCCCTACCATGCCTCGGTACTGCCTGTTCCGGG
 ACACGGTCAACTGCCTCGAGAATGGAGTCCACTGGACTGCCTTACCGCATCCAGTAAACATGAGCAC
 TGTTCCGATTCTTCGCGCTCTGGACCAAGGCTCCAGATGGAGTGTGAGGCGCCAGGAGCTGAAGGGC
 AAGGGTATTGAGGACACGTACTGCTTGTGGGCAGACTTGGCTTCAACAAGCCCATCCCAAACCACTG
 ATCTGCAGCCAGGGCCAGCAACCATGGTATCAGCCTGCAGGAGATTCCCCAGAGAGACGCAAGAAGCT
 GGAGAAAGCCAGGCCAGGCCAGTTACTGGGAAGTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_008192
- Insert Size:** 3327 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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

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]