

## Product datasheet for RC225555

### GUCY1A3 (NM\_001130686) Human Tagged ORF Clone

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids  |
| Product Name:             | GUCY1A3 (NM_001130686) Human Tagged ORF Clone                                  |
| Tag:                      | Myc-DDK  |
| Symbol:                   | GUCY1A3  |
| Synonyms:                 | GC-SA3; GUC1A3; GUCA3; GUCSA3; GUCY1A1   |
| Mammalian Cell Selection: | Neomycin   |
| Vector:                   | pCMV6-Entry (PS100001)   |
| E. coli Selection:        | Kanamycin (25 ug/mL)   |
| ORF Nucleotide Sequence:  | >RC225555 representing NM_001130686<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTTCTGCACGAAGCTCAAGGATCTCAAGATCACAGGAGAGTGTCTTTCTCCTTACTGGCACCAGGTC  
AAGTTCCTAACGAGTCTCAGAGGAGGCAGCAGGAAGCTCAGAGAGCTGCAAAGCAACCGTGCCCATCTG  
TCAAGACATTCTGAGAAGAACAACAAGAAAGTCTTCTCAAAGAAAAACCGTCCGAGCCGAGTCTAT  
CTTCACACTTTGGCAGAGAGTATTTGCAAAGTATTTCCAGAGTTTGAACGGTGAATGTTGCACCTC  
AGAGAACATTGGCAAAGCACAAAATAAAAGAAAGCAGGAAATCTTTGAAAGAGAAGACTTTGAAAAAC  
AATTGCAGAGCAAGCAGTTGCAGCAGGAGTTCAGTGGAGTTATCAAAGAATCTTTGGTGAAGAGGTT  
TTTAAATATGTTACGAGGAAGATGAAAACATCCTTGGGGTGGTTGGAGGCACCCCTAAAGATTTTTTAA  
ACAGCTTCAGTACCCTTCTGAAACAGAGCAGCCATTGCCAAGAAGCAGGAAAAAGGGCAGGCTTGAGGA  
CGCCTCCATTCTATGCCTGGATAAGGAGGATGATTTTCTACATGTTTACTACTTCTTCCCTAAGAGAACC  
ACCTCCCTGATTCTTCCCGGCATCATAAAGGCAGCTGCTCACGTATTATGAAACGGAAGTGAAGTGT  
CGTTAATGCCTCCCTGCTTCCATAATGATTGCAGCGAGTTTGTGAATCAGCCCTACTTGTGTACTCCGT  
TCACATGAAAGCACCAAGCCATCCCTGTCCCCAGCAAACCCAGTCCCTCGTGGTATTCCCACATCG  
CTATTCTGCAAGACATTTCCATTCCATTGTTGACAAAGATGACAATTTGCAATTTGGCAATG  
GCATCAGAAGGCTGATGAACAGGAGAGACTTTCAAGGAAAGCCTAATTTGAAGAATACTTTGAAATTCT  
GACTCCAAAAATCAACCAGACGTTTAGCGGGATCATGACTATGTTGAATATGCAGTTTGTGTACGAGTG  
AGGAGATGGGACAACTCTGTGAAAAATCTTCAAGGGTAAGGAAAACA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC225555 representing NM\_001130686  
Red=Cloning site Green=Tags(s)

MFCTKLKDLKITGECPFLLAPGQVPNESSEEAAGSSESCKATVPICQDIPEKNIQESLPQRKTSRSRVY  
 LHTLAESICKLIFPEFERLNVALQRTLAKHKIKESRKSLEREDFEKTI AEQAVAAGVPEVIKESLGEEV  
 FKICYEEDENILGVVGGTLKDFLNSFSTLLKQSSHQCQAGKRGRLEDASILCLDKEDDFLHVVYFFPKRT  
 TSLILPGI I KAAAHLVYETEVEVSLMPPCFHNDCESEFVNQPYLLYSVHMKSTKPSLSPSKPQSSLVIPTS  
 LFCKTFPFHFMFDKMTILQFGNGIRRLMNRDFQGKPNFEEYFEILTPKINQTFSGIMTMLNMQFVVRY  
 RRWDNSVKKSSRVKTK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8055\\_b03.zip](https://cdn.origene.com/chromatograms/mk8055_b03.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001130686

**ORF Size:** 1098 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\\_001130686.1](#), [NP\\_001124158.1](#)

**RefSeq ORF:** 1100 bp

**Locus ID:** 2982

**Cytogenetics:** 4q32.1

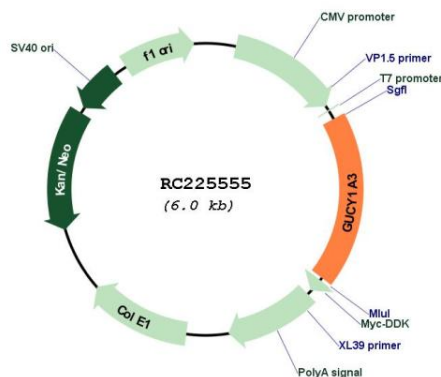
**Protein Families:** Druggable Genome

**Protein Pathways:** Gap junction, Long-term depression, Purine metabolism, Vascular smooth muscle contraction

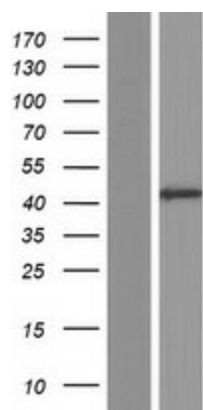
**MW:** 41.6 kDa

**Gene Summary:** Soluble guanylate cyclases are heterodimeric proteins that catalyze the conversion of GTP to 3',5'-cyclic GMP and pyrophosphate. The protein encoded by this gene is an alpha subunit of this complex and it interacts with a beta subunit to form the guanylate cyclase enzyme, which is activated by nitric oxide. Several transcript variants encoding a few different isoforms have been found for this gene. [provided by RefSeq, Jan 2012]

## Product images:



Circular map for RC225555



Western blot validation of overexpression lysate (Cat# [LY427240]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC225555 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).