

Product datasheet for **RC226038**

GUCY1A1 (NM_001130687) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GUCY1A1 (NM_001130687) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GUCY1A1
Synonyms:	GC-S-alpha-1; GC-SA3; GCS-alpha-3; GUC1A3; GUCA3; GUCSA3; GUCY1A3; MYMY6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC226038 representing NM_001130687
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTTCTGCACGAAGCTCAAGGATCTCAAGATCACAGGAGAGTGTCTTTCTCCTTACTGGCACCAGGTC
 AAGTTCCTAACGAGTCTTCAGAGGAGGAGCAGGAAGCTCAGAGAGCTGCAAAGCAACCGTGCCCATCTG
 TCAAGACATTCCTGAGAAGAACATACAAGAAAGTCTTCTCAAAGAAAAACAGTCGGAGCCGAGTCTAT
 CTTACACTTTGGCAGAGAGTATTTGCAAAGTATTTCCAGAGTTTGAACGGCTGAATGTTGCACTTC
 AGAGAATTGGCAAAGCAGCAAAATAAAAGAAAGCAGGAAATCTTTGAAAGAGAAGACTTTGAAAAAC
 AATTGCAGAGCAAGCAGTTGCAGCAGGAGTCCAGTGGAGTTATCAAAGAATCTTTGGTGAAGAGGTT
 TTTAAAATATGTTACGAGGAAGATGAAAACATCCTTGGGGTGGTGGAGGCACCCCTAAAGATTTTTTAA
 ACAGCTTCAGTACCTTCTGAAACAGAGCAGCCATTGCCAAGAAGCAGGAAAAAGGGGCAGGCTTGAGGA
 CGCTCCATTCTATGCCTGGATAAGGAGGATGATTTTCTACATGTTTACTACTTCTCCCTAAGAGAACC
 ACCTCCCTGATTCTCCCGGCATCATAAAGGCAGCTGCTCACGATTATATGAAACGGAAGTGGAAAGTGT
 CGTTAATGCCTCCCTGCTTCCATAATGATTGCAGCGAGTTTGTGAATCAGCCCTACTTGTGTACTCCGT
 TCACATGAAAAGCACCAAGCCATCCCTGTCCCCAGCAAACCCAGTCTCGCTGGTGAATCCCACATCG
 CTATTCTGCAAGACATTTCCATTCCATTTCATGTTTGACAAAGATATGACAATTTGCAATTTGGCAATG
 GCATCAGAAGGCTGATGAACAGGAGAGACTTTCAAGGAAAGCCTAATTTTGAAGAATACTTTGAAATTTCT
 GACTCCAAAAATCAACCAGACGTTTAGCGGGATCATGACTATGTTGAATATGCAGTTTGTGTACGAGTG
 AGGAGATGGGACAACCTGTGAAAAATCTTCAAGGGTTATGGACCTCAAAGGCCAAATGATCTACATTTG
 TTGAATCCAGTGCAATCTTGTTTTTGGGGTCACCCTGTGTGGACAGATTAGAAGATTTTACAGGACGAGG
 GCTCTACCTCTCAGACATCCCAATTCACAATGCCTGAGGGATGTGGTCTTAATAGGGGAACAAGCCCGA
 GCTCAAGATGGCCTGAAGAAGAGGCTGGGGAAGCTGAAGGCTACCCTTGAGCAAGCCCACCAAGCCCTGG
 AGGAGGAGAAGAAAAAGACAGTAGACCTTCTGTGCTCCATATTTCCCTGTGAGGTTGCTCAGCAGCTGTG
 GCAAGGGCAAGTTGTGCAAGCCAAGAAGTTCAGTAATGTCACCATGCTCTTCTCAGACATCGTTGGGTTT
 ACTGCCATCTGCTCCCAGTGTCCAGGCTGCAGGTCATCACCATGCTCAATGCACGTACTACTCGCTTCG
 ACCAGCAGTGTGGAGAGCTGGATGTCTACAAGGTGGAGACCATTGGCGATGCCTATTGTGTAGTGGGGG
 ATTACACAAAGAGAGTGATACTCATGCTGTTTCAAGATGCGCTGATGGCCCTGAAGATGATGGAGCTCTCT
 GATGAAGTTATGTCTCCCATGGAGAACCTATCAAGATGCGAATTGGACTGCACTCTGGATCAGTTTTTG
 CTGGCGTGGTGGAGTTAAAATGCCCGTACTGTCTTTTGGAAACAATGCTCACTCTGGCTAACAAATT
 TGAGTCTGCAGTGTACCACGAAAAATCAATGTACGCCCAACAACCTTACAGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC226038 representing NM_001130687
 Red=Cloning site Green=Tags(s)

MFCTKLKDLKITGECPFSLAPGQVNPESSEEAAGSSESCKATVPICQDIPEKNIQESLPQRKTSRSRVY
 LHTLAESICKLIFPEFERLNVALQRTLAKHKIKESRKSLEDFEKTIAEQAVAAGVPEVIKESLGEEV
 FKICYEEDENILGVVGGTLKDFLNSFSTLLKQSSHCQEAGKRGRLEDASILCLDKEDDFLHVYFFPKRT
 TSLILPGI IKAHVL YETEVESLMPPCFHNDCESEFVNQPYLLYSVHMSTKPSLSPSKPQSSLVIPTS
 LFCKTFPFHFMFDKMTILQFGNGIRRLMNRDFQGKPNFEEYFEILTPKINQTFSGIMTMLNMQFVVRV
 RRWDNSVKKSSRVMDLKGQMIYIVESSAILFLGSPCVDRLEDFTGRGLYLSDIPIHNALRDVVLIGEVAR
 AQDGLKKRLGKLKATLEQAHALEEEKKKTVDLLCSIFPCEVAQQLWQQVYVQAKKFSNVTMLFSDIVGF
 TAICSQCSPLQVITMLNLYTRFDQCGELDVYK VETIGDAYCVAGGLHKESDTHAVQIALMALKMMELS
 DEVMSPHGEPKMRIGLHSGSVFAGVGVKMPRYCLFGNNVTLANKFESCSVPRKINVSPTTYR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8070_c11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001130687

ORF Size: 1872 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.

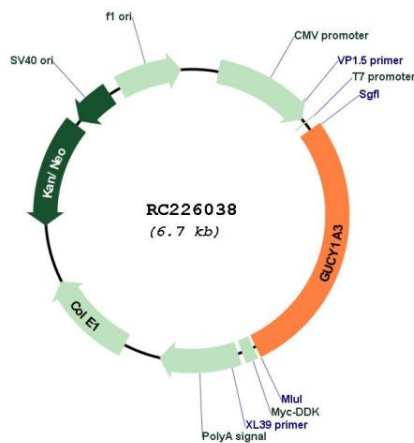
RefSeq: [NM_001130687.3](#)

RefSeq ORF: 1875 bp

Locus ID: 2982

UniProt ID: [Q02108](#)
Cytogenetics: 4q32.1
Protein Families: Druggable Genome
Protein Pathways: Gap junction, Long-term depression, Purine metabolism, Vascular smooth muscle contraction
MW: 70 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 RC226038