

## Product datasheet for RC213901

### GUCY2C (NM\_004963) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GUCY2C (NM_004963) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GUCY2C
Synonyms:	DIAR6; GC-C; GUC2C; MECIL; MUCIL; STAR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC213901 representing NM_004963 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAAGACGTTGCTGTTGGACTTGGCTTTGTGGTCACTGCTCTCCAGCCCGGGTGGCTGCCTTTAGTT  
CCCAGGTGAGTCAGAAGTCCACAATGGCAGCTATGAAATCAGCGTCCTGATGATGGCAACTCAGCCTT  
TGCAGAGCCCTGAAAACTTGAAGATGCGGTGAATGAGGGGCTGAAATAGTGAGAGGACGTCTGCAA  
AATGCTGGCCTAAATGTGACTGTGAACGCTACTTTCATGTATTCGGATGGTCTGATTATAACTCAGGCC  
ACTGCCGAGTAGCACCTGTGAAGCCTCGACCTACTCAGAAAAATTTCAAATGCACAACGGATGGGCTG  
TGTCTCATAGGGCCCTCATGTACATACTCCACCTTCCAGATGTACCTTGACACAGAATTGAGTACCCC  
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GAGCACTTCGATGTTTACAAGAATGGTACAGAAACTGAGGACTGTTTCTGGTACCTTAATGCTCTGGAG  
GCTAGCGTTTCTATTTCTCCACGAACCTCGGCTTAAAGGTGGTGTAAAGACAAGATAAGGAGTTTCAGG  
ATATCTTAATGGACCACAACAGGAAAAGCAATGTGATTATTATGTGTGGTGGTCCAGAGTTCCCTCAAA  
GCTGAAGGGTACCGAGCAGTGGCTGAAGACATTGTCAATTATTCTAGTGGATCTTTTCAATGACCAGTAC  
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CCTAATGATATTACAGGCCGGGGCCCTCAGATCCTGATGATTGCAGTCTTACCCTCACTGGAGCTGTGG  
TGCTGCTCCTGCTCGCTCCTCTGATGCTCAGAAAAATAGAAAAGATTATGAACTTCGTCAGAAAAA  
ATGGTCCACATTCCTCTGAAAATATCTTCTCTGGAGACCAATGAGACCAATCATGTTAGCCTCAAG



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ATCGATGATGACAAAAGACGAGATACAATCCAGAGACTACGACAGTGCAAATACGACAAAAAGCGAGTGA  
 TTCTCAAAGATCTCAAGCACAATGATGGTAATTTCACTGAAAAACAGAAGATAGAATTGAACAAGTTGCT  
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 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC213901 representing NM\_004963  
 Red=Cloning site Green=Tags(s)

MKTLLLDLALWSLLFQPGWLSFSSQVSQNCNHSYIEISVLMMGNSAFAEPLKNLEDAVNEGLEIVRGLQ  
 NAGLNVTVNATFMYSDGLIHNSGDCRSSTCEGLDLLRKISNAQRMGCVLIGPSCTYSTFQMYLDTELSYP  
 MISAGSFGLSVDYKETLTRLMSAPKLMYFLVNFWKTNLDPFKTYSWSTSYVYKNGTETEDCFWYLNAL  
 ASVSYFSHELGFVVLQDKEFQDILMDHNRKSNVIIMCGGPEFLYKLGDRVAEDIVILVDLFDNDQY  
 LEDNVTAPDYMKNVLVTLSPGNSLLNSSFSRNLSPTRKDFALAYLNGILLFGHMLKIFLENGENITTPK  
 FAHAFRNLTFEGYDGPVTLDDWGDVDSTMVLLYTSVDTKKYKVLTYDTHVNKTYPVDMSPFTTWKNSKL  
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 IDDDKRRDTIQRLRQCKYDKRVLKDLKHNDGNFTEKQKIELNKLQIDYYNLTKFYGTVKLDTMIFGV  
 IEYCERGLREVLNDTISYPDGTGFMDFEKFISVLVDIAKMSYLHSSKTEVHGRLKSTNCVVDSRMVVKI  
 TDFGCNSILPPKDLWTAPEHLRQANISQKGDVSYGIIAQEIIIRKETFYTLSCRDRNEKIFRVENSN  
 MKPFRPDLFLETAEEKELEVYLLVKNCWEEDPEKRPDFKKEITLAKIFGLFHDQKNESYMDTLIRRLQL  
 YSRNLEHLVEERTQLYKAERDRADRLNFMLLPRLVVKSLKEKGFVEPELYEEVTIYFSDIVGFTTICKYS  
 TPMEVDMLNDIYKSFHDHVDHHDVYKVEITIGDAYMVASGLPKRNGNRHAIDIKMALEILSFMGTFELE  
 HLPGLPIWIRIGVHSGPCAAGVVGIKMPRYCLFGDVTNTASRMESTGLPLRIHVSGSTIAILKRTECQFL  
 YEVRGETYKGRNETTYWLTGMKDQKFNLPPTVENQQLQAEFSDMIANSLQKRQAAGIRISQKPRRY  
 ASYKKGTLLEYLQLNTTDDKESTYF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6220\\_a02.zip](https://cdn.origene.com/chromatograms/mk6220_a02.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_004963

**ORF Size:** 3219 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\\_004963.2](#)

**RefSeq Size:** 3745 bp

**RefSeq ORF:** 3222 bp

**Locus ID:** 2984

**UniProt ID:** [P25092](#)

**Cytogenetics:** 12p12.3

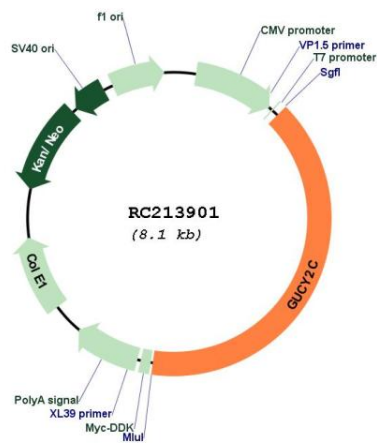
**Protein Families:** Druggable Genome, Protein Kinase, Transmembrane

**Protein Pathways:** Purine metabolism

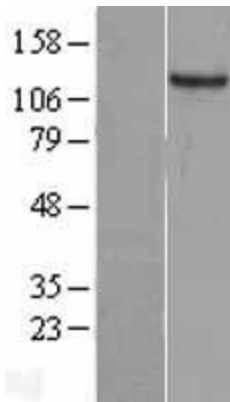
**MW:** 123.2 kDa

**Gene Summary:** This gene encodes a transmembrane protein that functions as a receptor for endogenous peptides guanylin and uroguanylin, and the heat-stable E. coli enterotoxin. The encoded protein activates the cystic fibrosis transmembrane conductance regulator. Mutations in this gene are associated with familial diarrhea (autosomal dominant) and meconium ileus (autosomal recessive). [provided by RefSeq, Nov 2016]

**Product images:**



Circular map for RC213901



Western blot validation of overexpression lysate (Cat# [LY417623]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213901 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).