

Product datasheet for **RG213901**

GUCY2C (NM_004963) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GUCY2C (NM_004963) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GUCY2C
Synonyms:	DIAR6; GC-C; GUC2C; MECIL; MUCIL; STAR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG213901 representing NM_004963 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGACGTTGCTGTTGGACTTGGCTTTGTGGTCACTGCTCTCCAGCCCGGTGGCTGTCCTTTAGTT
CCCAGGTGAGTCAGAAGTCCACAATGGCAGCTATGAAATCAGCGTCCTGATGATGGCAACTCAGCCTT
TGCAGAGCCCTGAAAACTTGAAGATGCGGTGAATGAGGGGCTGAAATAGTGAGAGGACGTCTGCAA
AATGCTGGCCTAAATGTGACTGTGAACGCTACTTTCATGTATTCGGATGGTCTGATTATAACTCAGGCC
ACTGCCGAGTAGCACCTGTGAAGCCTCGACCTACTCAGAAAAATTTCAAATGCACAACGGATGGGCTG
TGTCTCATAGGGCCCTCATGTACATACTCCACCTTCCAGATGTACCTTGACACAGAATTGAGTACCCC
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CTAGAAAGTTGATGTAATTTTGGTAACTTTTGGAAAACCAACGATCTGCCCTTCAAACCTTATTCCTG
GAGCACTTCGATGTTTACAAGAATGGTACAGAAACTGAGGACTGTTTCTGGTACCTTAATGCTCTGGAG
GCTAGCGTTTCTATTTCTCCACGAACCGGCTTTAAGGTGGTGTAAAGACAAGATAAGGAGTTTCAGG
ATATCTTAATGGACCACAACAGGAAAAGCAATGTGATTATTATGTGTGGTGGTCCAGAGTTCCCTCAAA
GCTGAAGGGTACCGAGCAGTGGCTGAAGACATTGTATTATTCTAGTGGATCTTTTCAATGACCAGTAC
TTGGAGACAATGTCACAGCCCTGACTATATGAAAAATGCTTGTCTGACGCTGCTCCTGGGAAT
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TGCTGCTCCTGCTCGCTCCTCTGATGCTCAGAAAAATAGAAAAGATTATGAACTTCGTCAGAAAAA
ATGGTCCACATTCCTCCTGAAAATATCTTCTCTGGAGACCAATGAGACCAATCATGTTAGCCTCAAG



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ATCGATGATGACAAAAGACGAGATACAATCCAGAGACTACGACAGTGCAATACGACAAAAAGCGAGTGA
 TTCTCAAAGATCTCAAGCACAATGATGGTAATTTCACTGAAAAACAGAAGATAGAATTGAACAAGTTGCT
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 TATGAAGTGAGAGGAGAAAACATACTTAAAGGGAAGAGGAAATGAGACTACCTACTGGTACTGGGATGA
 AGACCAGAAAATCAACCTGCCAACCCCTCCTACTGTGGAGAATCAACAGCGTTTTGCAAGCAGAATTTTC
 AGACATGATTGCCAACTCTTACAGAAAAGACAGGCAGCAGGGATAAAGAAGCCAAAAACCCAGACGGGTA
 GCCAGCTATAAAAAAGGCACTCTGGAATACTTGCAGCTGAATACCACAGACAAGGAGACCTATTTT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG213901 representing NM_004963
 Red=Cloning site Green=Tags(s)

MKTLLLDLALWSLLFQPGWLSFSSQVSQNHNGSYEISVLMMGNSAFAEPLKNLEDAVNEGLEIVRRLQ
 NAGLNVTYNATFMYSDGLIHNSGDCRSSTCEGLDLLRKISNAQRMGCVLIGPSCTYSTFQMYLDTELSYP
 MISAGSFGLSCDYKETLTRLMSARKLMYFLVNFWKTNLDPFKTYSWSTSYYVYKNGTETEDCFWYLNAL
 ASVSYFSHELGFVVLQRQKEFQDILMDHNRKSNVIIMCGGPEFLYKLGDRVAEDIVIILVDLFNDQY
 LEDNVTAPDYMKNVLLTLSPGNSLLNSSFSRNLSPTKRDFALAYLNGILLFGHMLKIFLENGENITTPK
 FAHAFRNLTFEGYDGPVTLDDWGDVDSTMVLLYTSVDTKKYKVLTYDTHVNKTYPVDMSPTFTWKNL
 PNDITGRGPQILMIAVFTLTGAVVLLLLVALLMLRKYRKDYELRQKKWSHIPPENIFPLETNETNHVSLK
 IDDDKRRDTIQRLRQCKYDKRVLKDLKHNDGNFTEKQKIELNKLQIDYYNLTKFYGTVKLDTMIFGV
 IEYCERGLREVLNDTISYPDGTGFMDFWFKISVLYDIAKGMSYLHSSKTEVHGRLKSTNCVVDSRMVVKI
 TDFGCNSILPPKKDLWTAPEHLRQANISQKGDVYSYGIIEQEIILRKETFYTLSCRDRNEKIFRVENSNG
 MKPFRPDLFLETAEEKELEVYLLVKNCWEEDPEKRPDFKKIETTAKIFGLFHDQKNESYMDTLIRRLQL
 YSRNLEHLVEERTQLYKAERDRADRLNFMLLPRLVVKSLEKGFVEPELYEEVTIYFSDIVGFTTICKYS
 TPMEVVDMLNDIYKSFHDHVDHHDVYKVEITIGDAYMVASGLPKRNGNRHAIDIAKMALEILSFMGTFELE
 HLPGLPIWIRIGVHSGPCAAGVVGIKMPRYCLFGDVTNTASRMESTGLPLRIHVSGSTIAILKRTECQFL
 YEVRGETYKGRGNETTYWL TGMKDQKFNLPPTVENQQLQAEFSDMIANSLQKRQAAGIRSQKPRRV
 ASYKKGTYLQLNTTDDKESTYF

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-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](#)

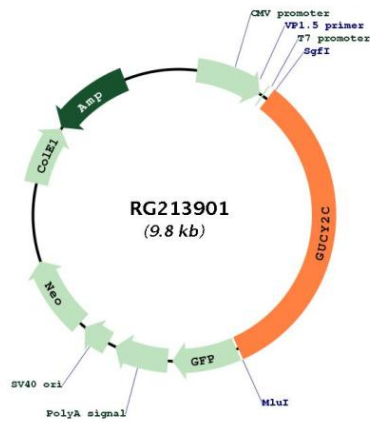
RefSeq Size: 3745 bp

RefSeq ORF: 3222 bp

Locus ID: 2984

UniProt ID: [P25092](#)
Cytogenetics: 12p12.3
Protein Families: Druggable Genome, Protein Kinase, Transmembrane
Protein Pathways: Purine metabolism
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 RG213901