

## Product datasheet for **RG221085**

### Uroguanylin (GUCA2B) (NM\_007102) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Uroguanylin (GUCA2B) (NM\_007102) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Uroguanylin  
**Synonyms:** GCAP-II; UGN  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG221085 representing NM\_007102  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGGCTGCAGGGCTGCATCAGGGCTCCTGCCAGGAGTGGCCGTGGTCTCCTGCTGCTGCTGCAGAGCA  
 CACAGTCAGTCTACATCCAGTACCAAGGCTTCCGGTCCAGCTGGAATCCATGAAGAAGCTGAGTGACCT  
 GGAGGCACAGTGGGCACCCAGCCCCGCTGCAGGCCAGAGCCTCCTGCCGCGGTGTGCCACCACCT  
 GCTCTGCCTCAGGACCTCAGCCTGTCTGCGCCTCGCAGGAGGCTCCAGCATCTCAAGACCCTGAGGA  
 CCATCGCTAACGACGACTGTGAGCTGTGTGAACGTTGCGTGTACCGGCTGCCTC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG221085 representing NM\_007102  
 Red=Cloning site Green=Tags(s)  
 MGCRAASGLLPGVAVVLLLLLQSTQSVYIQYQGFVRVQLESMKKLSDLEAQWAPSPRLQAQSLLPVCHHP  
 ALPQDLQPVCASQEASSIFKTLRTIANDDCELCVNVACTGCL

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** SgfI-MluI



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**Cloning Scheme:**


**ACCN:** NM\_007102

**ORF Size:** 336 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.

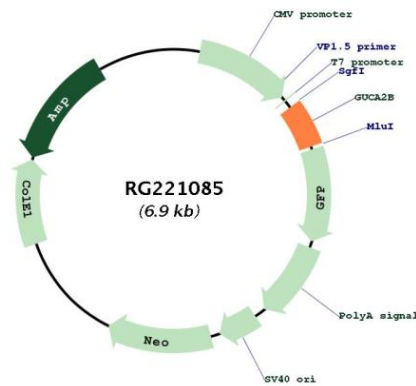
**RefSeq:** [NM\\_007102.3](#)

**RefSeq Size:** 596 bp

**RefSeq ORF:** 339 bp

**Locus ID:** 2981  
**UniProt ID:** [Q16661](#)  
**Cytogenetics:** 1p34.2  
**Protein Families:** Druggable Genome, Secreted Protein, Transmembrane  
**Gene Summary:** This gene encodes a preproprotein that is proteolytically processed to generate multiple protein products, including uroguanylin, a member of the guanylin family of peptides and an endogenous ligand of the guanylate cyclase-C receptor. Binding of this peptide to its cognate receptor stimulates an increase in cyclic GMP and may regulate salt and water homeostasis in the intestine and kidneys. [provided by RefSeq, Nov 2015]

**Product images:**



Circular map for RG221085