

## Product datasheet for **RC221085**

### 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:** Myc-DDK  
**Symbol:** Uroguanylin  
**Synonyms:** GCAP-II; UGN  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC221085 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGGCTGCAGGGCTGCATCAGGGCTCCTGCCAGGAGTGGCCGTGGTCTCCTGCTGCTGCTGCAGAGCA  
 CACAGTCACTACATCCAGTACCAAGGCTTCCGGTCCAGCTGGAATCCATGAAGAAGCTGAGTGACCT  
 GGAGGCACAGTGGGCACCCAGCCCCGCTGCAGGCCAGAGCCTCCTGCCGCGGTGTGCCACCACCT  
 GCTCTGCCTCAGGACCTCAGCCTGTCTGCGCCTCGCAGGAGGCTCCAGCATCTCAAGACCCTGAGGA  
 CCATCGCTAACGACGACTGTGAGCTGTGTGAACGTTGCGTGTACCGGCTGCCTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC221085 protein sequence  
 Red=Cloning site Green=Tags(s)  
 MGCRAASGLLPGVAVVLLLLLQSTQSVYIQYQGFVRVQLESMMKLSLEAQWAPSPRLQAQSLLPVCHHP  
 ALPQDLQPVCASQEASSIFKTLRTIANDDCELCVNVACTGCL

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6473\\_c07.zip](https://cdn.origene.com/chromatograms/mk6473_c07.zip)

**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:** 597 bp

**RefSeq ORF:** 339 bp

**Locus ID:** 2981

UniProt ID: [Q16661](#)

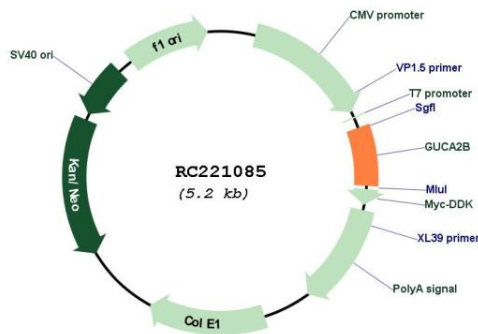
Cytogenetics: 1p34.2

Protein Families: Druggable Genome, Secreted Protein, Transmembrane

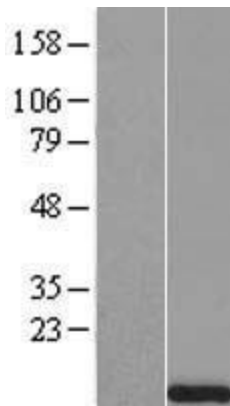
MW: 12.1 kDa

**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]

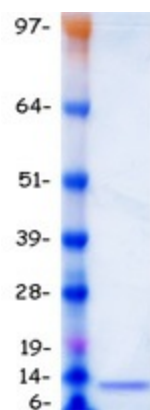
**Product images:**



Circular map for RC221085



Western blot validation of overexpression lysate (Cat# [LY416197]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221085 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GUCA2B protein (Cat# [TP321085]). The protein was produced from HEK293T cells transfected with GUCA2B cDNA clone (Cat# RC221085) using MegaTran 2.0 (Cat# [TT210002]).