

Product datasheet for RC217195

Guanylin (GUCA2A) (NM_033553) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Guanylin (GUCA2A) (NM_033553) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: Guanylin
Synonyms: GCAP-I; GUCA2; STARA
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC217195 representing NM_033553
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAATGCCTTCCTGCTCTCCGCACTGTGCCTCCTTGGGGCTGGGCCCTTGGCAGGAGGGGTACCG
TGCAGGATGAAATTTCTCCTTTCTCTGGAGTCAGTGAAGAAGCTCAAAGACCTCCAGGAGCCCCAGGA
GCCAGGGTTGGAAACTCAGGAACCTTGCACCCATCCCTGGTGAACCTGTGGTCCCATCTCTGTAGC
AACCCGAACCTTCCAGAAGAACTCAAGCCTCTCTGCAAGGAGCCCAATGCCAGGAGATACTTCAGAGGC
TGGAGAAATCGCTGAGGACCCGGGCACATGTGAAATCTGTGCCTACGCTGCCTGTACCGGATGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC217195 representing NM_033553
 Red=Cloning site Green=Tags(s)
 MNAFLLSALCLLGAWAALAGGVTVQDGNFSFSLESVKLKLKDLQEPQEPVQKLRNFAPIGPEVVPILCS
 NPNFPEELKPLCKEPNAQEILQRLLEEIAEDPGTCEICAYAACTGC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8011_f10.zip

Restriction Sites: SgfI-MluI



[View online »](#)

Cloning Scheme:



ACCN: NM_033553

ORF Size: 345 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_033553.3](#)

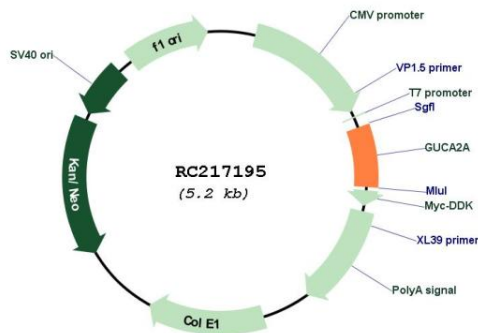
RefSeq Size: 575 bp

RefSeq ORF: 348 bp

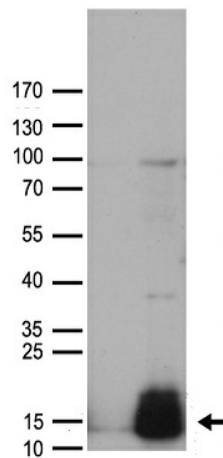
Locus ID: 2980

UniProt ID: [Q02747](#)
Cytogenetics: 1p34.2
Protein Families: Secreted Protein, Transmembrane
MW: 12.2 kDa
Gene Summary: Endogenous activator of intestinal guanylate cyclase. It stimulates this enzyme through the same receptor binding region as the heat-stable enterotoxins.[UniProtKB/Swiss-Prot Function]

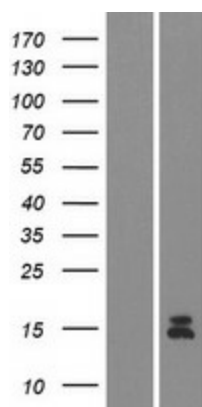
Product images:



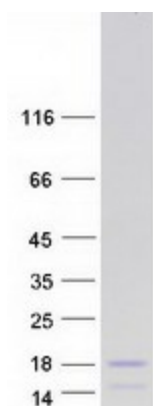
Circular map for RC217195



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY GUCA2A (Cat# RC217195, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GUCA2A antibody (Cat# [TA890064]). Positive lysates [LY409429] (100ug) and [LC409429] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY409429]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217195 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GUCA2A protein (Cat# [TP317195]). The protein was produced from HEK293T cells transfected with GUCA2A cDNA clone (Cat# RC217195) using MegaTran 2.0 (Cat# [TT210002]).