

## Product datasheet for **SC303648**

### GCAP3 (GUCA1C) (NM\_005459) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GCAP3 (GUCA1C) (NM_005459) Human Untagged Clone
Tag:	Tag Free
Symbol:	GUCA1C
Synonyms:	GCAP3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC303648 representing NM_005459. Blue=Insert sequence Red=Cloning site Green=Tag(s)

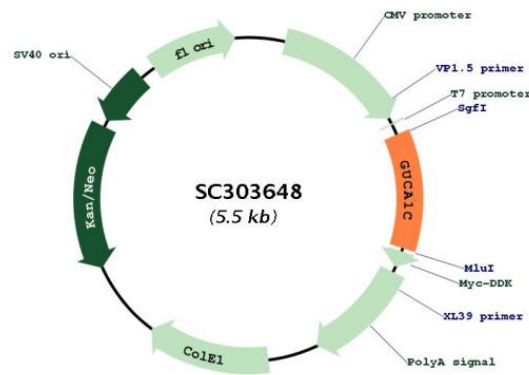
```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTGCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGGGAATGGCAAATCTATAGCTGGTATCAGAAAGCAGTTCCTACACAAGAGACCCATGTGTGGTAC
AGAACATTTATGATGGAATATCCATCCGGCCTGCAAACTACATGAATTTAAGACACTTTTGGTCTG
CAAGGTCTGAATCAGAAGCCAATAAACATATTGATCAAGTTTATAATACCTTTGACACGAACAAGGAT
GGATTTGTTGACTTTTTGGAGTTTATTGCTGCTGTAATCTAATCATGCAAGAAAAATGGAGCAAAAA
TTAAAATGGTATTTAAGCTGTATGATGCTGATGGAAATGGTTCTATTGACAAAAATGAACACTGGAC
ATGTTTCATGGCGGTACAAGCCCTCAATGGCCAGCAAACCTGAGTCCTGAAGAATTCATCAACTTGGTG
TTCCATAAGATCGATATAAAACAATGATGGGGAATTGACTTTAGAAGAATTTATCAATGGCATGGCAAAA
GATCAGGATCTCCTGGAGATTGTTTACAAGAGCTTCGACTTCTCCAATGTGCTGAGAGTAATCTGTAAT
GGGAAGCAGCCAGACATGGAGACAGACTCCTCAAATCTCCTGACAAGGCTGGTCTAGGGAAGGTGAAA
ATGAAGTAG
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

Restriction Sites: SgfI-MluI



[View online »](#)

## Plasmid Map:



ACCN: NM\_005459

Insert Size: 630 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in *E. coli* are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_005459.3</a>
<b>RefSeq Size:</b>	925 bp
<b>RefSeq ORF:</b>	630 bp
<b>Locus ID:</b>	9626
<b>UniProt ID:</b>	<a href="#">O95843</a>
<b>Cytogenetics:</b>	3q13.13
<b>Protein Pathways:</b>	Olfactory transduction
<b>MW:</b>	23.8 kDa
<b>Gene Summary:</b>	Stimulates guanylyl cyclase 1 (GC1) and GC2 when free calcium ions concentration is low and inhibits guanylyl cyclases when free calcium ions concentration is elevated. This Ca(2+)-sensitive regulation of guanylyl cyclase (GC) is a key event in recovery of the dark state of rod photoreceptors following light exposure.[UniProtKB/Swiss-Prot Function]