

## Product datasheet for **SC324283**

### GCAP1 (GUCA1A) (NM\_000409) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GCAP1 (GUCA1A) (NM_000409) Human Untagged Clone
Tag:	Tag Free
Symbol:	GCAP1
Synonyms:	GUCA1A; GUCA1ANB-GUCA1A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >OriGene sequence for NM\_000409.2  
 CAGAAGTTCACCTCACCATCAAGAAAGGCCCTGGTCCAGGATGTGCAAGGTGTGATGAA  
 ATCACAGGGCTGGGAAGGTCAGCTCGGGGTCACAAGAAGCCTGATGGGCAGGAAAGAGC  
 ATGAAAGCCCCAGCCAGCCTCACCTGTGCGGCTGGGAGGACTCACAGAAACCTCTGTAC  
 CCAGTCATGGGCCAAAGACACCGTCATGCAAGGGGGTGAAGGCTCCACTCGTCCCGGC  
 CCCGGGCGTGAAGCAGGACCTCGAGCAGTCTCTGGCAGCAGCCTATGTGCCGGTCTGTG  
 TGGACTTAAGGGGCAGAATCCGGACAAGCTCAGGGTACAGTCTCCCCTGGGGTGAAG  
 GATTTAGTGGAGACTCTTAACACCAGTTCTCTGGCATCTGTGAGTTTGAGTGTGGCCAT  
 CATCTTCTCCTTCTGCTCTCTCCTCTCCACATTTCCCGGTACCATCTGATCCATCAGG  
 CCCTTCTTTGCTCAGGCCTGAAGGACTCAGGCCTGTGAGAGAGGACGGCCCCGTTGTCGG  
 CCAAGACACCTTTGGGCGAGGAGCAGCGAACAGGGCCTGTCCATCTCAGACGTCAGCCCC  
 CTGAAGGCCTGAGCAATGGGCAACGTGATGGAGGGAAAGTCAGTGGAGGAGCTGAGCAGC  
 ACCGAGTGCCACCAGTGGTACAAGAAGTTCATGACTGAGTGCCCTCTGGCCAACTACC  
 CTCTATGAGTTCCGCCAGTTCTTCGGCCTCAAGAACCTGAGCCCCGTCGGCCAGCCAGTAC  
 GTGGAACAGATGTTTGGACTTTTACTTCAACAAGGACGGCTACATTGATTTTCATGGAG  
 TACGTGGCAGCGCTCAGCTTGGTCTCAAGGGGAAGGTGGAACAGAAGCTCCGCTGGTAC  
 TTCAAGCTCTATGATGTAGATGGCAACGGCTGCATTGACCGCGATGAGCTGCTCACCATC  
 ATCCAGGCCATTCGCGCCATTAACCCCTGCAGCGATACCACCATGACTGCAGAGGAGTTC  
 ACCGATACAGTGTCTCCAAGATTGACGTCAACGGGGATGGGGAATCTCCCTGGAAGAG  
 TTTATAGAGGGCGTCCAGAAGGACCAGATGCTCCTGGACACACTGACACGAAGCCTGGAC  
 CTTACCCGCATCGTGGCAGGCTCCAGAATGGCGAGCAAGACGAGGAGGGGGCTGACGAG  
 GCCGCTGAGGCAGCCGGCTGAGTGCACCCCGGCTGCTTCTGCACTAGCGGGTGGGGTG  
 GTATGGTGGTGCCTGTTGGTGGTGTCTGTCTTAACCCTAGATAGAATCTAATGAACT  
 AGAGGCTTAGCTCGCCTCTTAAAGGTCCATGGTGGCAGCAGAGAGGCAGAAGTGGGAGTC  
 CAGAGCCAGGAACAGTGAAGGATGGTTCCTGGCCCTCTGAGTGACAGCTGGTGGCAGCA  
 CTCCTTGTGGGGGCACTGTTCAACATCCCTCTGCCGTCGGGTGACCCCTAGCCCTTC  
 TGACTCTCTCCAGCTTTTCCAGCTTTCCCACTGAGCTTCTCCAGTCCATGCTCTTC  
 TGGACGTGGACTCTGAGGCAGAACTGAGCTTTTCCAGGCCTCTATGGAATCTGCGAG  
 ATCCAGTGGCTGCAGTTCATCCAGTGTGCAATCACACATCCATTCTGCCCTGGGGG  
 ACCCTGGAGCCTACTTGTGCGCTTTCATTTTATTGATTGACGCCTCCCTCAACAAGCA  
 TTTACTGAGCGCCTACTATGTAATAATGCTAGATGTTAGATGTACAAAGAAGACAGTTTT  
 CATCCTTAGGAACTCATAGGCTAATGGTGGAGACACAGACAAACATCATTATAATAAA  
 ATATGCTAAGAGAA  
 AA

- Restriction Sites:** Please inquire
- ACCN:** NM\_000409
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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).

**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\\_000409.2](#), [NP\\_000400.2](#)

**RefSeq Size:** 1976 bp

**RefSeq ORF:** 606 bp

**Locus ID:** 2978

**UniProt ID:** [P43080](#)

**Cytogenetics:** 6p21.1

**Domains:** EFh

**Protein Families:** Druggable Genome

**Protein Pathways:** Olfactory transduction

**Gene Summary:** This gene encodes an enzyme that plays a role in the recovery of retinal photoreceptors from photobleaching. This enzyme promotes the activity of retinal guanylyl cyclase-1 (GC1) at low calcium concentrations and inhibits GC1 at high calcium concentrations. Mutations in this gene can cause cone dystrophy 3 and code-rod dystrophy 14. provided by RefSeq, Jul 2020]  
Transcript Variant: This variant (1) encodes the same protein as variants 2 and 3.