

Product datasheet for RC220183

GCAP2 (GUCA1B) (NM_002098) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: GCAP2 (GUCA1B) (NM_002098) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: GCAP2
Synonyms: GCAP 2; GCAP2; GUCA2; RP48
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC220183 representing NM_002098
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGGCAGGAGTTTAGCTGGGAGGAGGCGGAGGCAGCTGGCGAGATAGATGTGGCGGAGCTCCAGGAGT
 GGTACAAGAAGTTTGTGATGGAGTGCCCCAGCGGCACACTCTTTATGCATGAGTTAAGCGCTTCTTCAA
 GGTACAGACGATGAGGAGGCCTCCAGTATGTAGAGGGCATGTTCCGAGCCTTCGACAAGAATGGGGAC
 AACACCATCGACTTCTGGAGTACGTGGCAGCTCTGAATCTCGTCTGAGGGCACCTGGAGCACAAGC
 TGAAGTGGACATTCAAGATCTATGATAAGGATGGCAATGGCTGCATCGACCGCTGGAGCTACTCAACAT
 TGTGGAGGGAATTTACCAGCTGAAGAAAGCCTGCCGCGGAGAGCTACAACTGAGCAAGGCCAGCTGCTC
 ACACCCGAGGAGGTCGTGGACAGGATCTTCTCTGGTGGATGAGAATGGAGATGGCCAGCTGTCTCTGA
 ACGAGTTTGTGAAGGTGCCCGTCGGGACAAGTGGGTGATGAAGATGCTGCAGATGGACATGAATCCAG
 CAGCTGGCTCGCTCAGCAGAGACGGAAGTGCCATGTTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC220183 representing NM_002098
 Red=Cloning site Green=Tags(s)

MGQEFSWEEAAGEIDVAELQEWYKFFVMECPSTGLFMHEFKRFFKVTDDDEASQYVEGMFRAFDKNGD
 NTIDFLEYVAALNLVLRGTLEHKLKWTFKIYDKDGNCGIDRLELLNIVEGIYQLKKACRRELQTEQGQLL
 TPEEVDRIFLLVDENGGQLSLNEFVEGARRDKWVMKMLQMDMNPSSWLAQQRKRSAMF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



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Chromatograms: https://cdn.origene.com/chromatograms/mk8019_h12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002098

ORF Size: 600 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_002098.6](#)

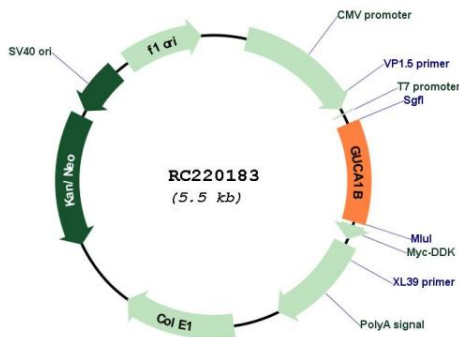
RefSeq Size: 2288 bp

RefSeq ORF: 603 bp

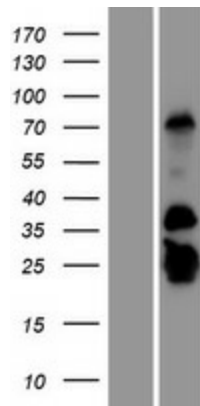
Locus ID: 2979

UniProt ID: [Q9UMX6](#)
Cytogenetics: 6p21.1
Protein Families: Druggable Genome
Protein Pathways: Olfactory transduction
MW: 23.2 kDa
Gene Summary: The protein encoded by this gene is a calcium-binding protein that activates photoreceptor guanylate cyclases. This gene may have arisen due to a gene duplication event since there is a highly similar gene clustered with it on chromosome 6. Mutations in this gene can cause a form of retinitis pigmentosa. [provided by RefSeq, Nov 2009]

Product images:



Circular map for RC220183



Western blot validation of overexpression lysate (Cat# [LY419534]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220183 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).