

## Product datasheet for **RG210292**

### **GNA11 (NM\_002067) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** GNA11 (NM\_002067) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** GNA11  
**Synonyms:** FBH; FBH2; FHH2; GNA-11; HHC2; HYPOC2  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG210292 representing NM\_002067  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGACTCTGGAGTCCATGATGGCGTGTTCCTGAGCGATGAGGTGAAGGAGTCCAAGCGGATCAACGCCG  
AGATCGAGAAGCAGCTGCGGGGACAAGCGCGACGCCCGCGGAGCTCAAGCTGCTGCTCGGCAC  
GGGCGAGAGCGGAAGAGCACGTTTCATCAAGCAGATGCGCATCATCCACGGCGCCGGCTACTCGGAGGAG  
GACAAGCGCGGCTTACCAAGCTCGTCTACCAGAACATCTTACCGCCATGCAGGCCATGATCCGGGCCA  
TGGAGACGCTCAAGATCCTCTACAAGTACGAGCAGAACAAGCCAATGCGCTCCTGATCCGGGAGGTGGA  
CGTGGAGAAGGTGACCACCTTCGAGCATCAGTACGTGAGTCCATCAAGACCCTGTGGGAGACCCGGGC  
ATCCAGGAATGCTACGACCGCAGGCGGAGTACCAGCTCTCCGACTCTGCCAAGTACTACCTGACCGACG  
TTGACCGCATCGCCACCTTGGGCTACCTGCCACCCAGCAGGACGTGCTGCGGGTCCGCGTGCCACCCAC  
CGGCATCATCGAGTACCCTTTCGACCTGGAGAACATCATCTTCCGGATGGTGGATGTGGGGGGCCAGCGG  
TCGGAGCGGAGGAAGTGGATCCACTGCTTTGAGAACGTGACATCCATCATGTTTCTCGTCGCCCTCAGCG  
AATACGACCAAGTCCCTGGTGGAGTCGGACAACGAGAACC GGATGGAGGAGAGCAAAGCCCTGTTCCGGAC  
CATCATCACCTACCCCTGGTCCAGAATCCTCCGTCATCCTCTCTCAACAAGAAGGACCTGCTGGAG  
GACAAGATCCTGTACTCGCACCTGGTGGACTACTTCCCCGAGTTCGATGGTCCCCAGCGGGAGCCCCAGG  
CGGCGCGGAGTTCATCCTGAAGATGTTCTGGACCTGAACCCCGACAGCGACAAGATCATCTACTACA  
CTTCACGTGTGCCACCGACCGGAGAACATCCGCTTCGTGTTCCGCGCCGTGAAGGACACCATCCTGCAG  
CTCAACCTCAAGGAGTACAACCTGGTC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG210292 representing NM\_002067  
 Red=Cloning site Green=Tags(s)

MTLESMMACCLSDEVKESKRINAEIEKQLRRDKRDARRELKLLLLGTGESGKSTFIKQMRIIHGAGYSEE  
 DKRGFTKLVYQNIIFTAMQAMIRAMETLKILYKYEQNKANALLIREVDVEKVTTFEHQYVSAIKTLWEDPG  
 IQECYDRRREYQLSDSAKYLLTDVDRIATLGYLPTQDVLVRVPTTGIIEYPFDLNIIIFRMVDVGGQR  
 SERRKWIHCFENVTSIMFLVALSEYDQVLVESDNENRMEESKALFRTIITYPWFQNSSVILFLNKKDLLE  
 DKILYSHLVDFPEFDGPQREPQAAREFILKMFVDLNPDSKIIYSHFTCATDTENIRFVFAVKDITILQ  
 LNLKEYNLV

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_002067

**ORF Size:** 1077 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\\_002067.1](#), [NP\\_002058.1](#)

**RefSeq Size:** 1540 bp

**RefSeq ORF:** 1080 bp

**Locus ID:** 2767

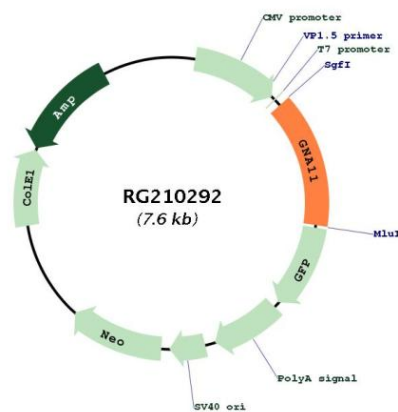
**UniProt ID:** [P29992](#)

**Cytogenetics:** 19p13.3

**Protein Pathways:** Calcium signaling pathway, Gap junction, GnRH signaling pathway, Long-term depression, Vascular smooth muscle contraction

**Gene Summary:** The protein encoded by this gene belongs to the family of guanine nucleotide-binding proteins (G proteins), which function as modulators or transducers in various transmembrane signaling systems. G proteins are composed of 3 units: alpha, beta and gamma. This gene encodes one of the alpha subunits (subunit alpha-11). Mutations in this gene have been associated with hypocalciuric hypercalcemia type II (HHC2) and hypocalcemia dominant 2 (HYPOC2). Patients with HHC2 and HYPOC2 exhibit decreased or increased sensitivity, respectively, to changes in extracellular calcium concentrations. [provided by RefSeq, Dec 2013]

## Product images:



Circular map for RG210292