

Product datasheet for **RG215437**

G0 Protein alpha (GNAO1) (NM_138736) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	G0 Protein alpha (GNAO1) (NM_138736) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	G0 Protein alpha
Synonyms:	DEE17; EIEE17; G-ALPHA-o; GNAO; HLA-DQB1; NEDIM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG215437 representing NM_138736 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGATGTACTCTGAGCGCAGAGGAGAGACCGCCCTCGAGCGGAGCAAGGCGATTGAGAAAACTCA
AAGAGGATGGCATCAGCGCCGCCAAAGACGTGAAATTACTCTGCTCGGGCTGGAGAATCAGGAAAAAG
CACCATTGTGAAGCAGATGAAGATCATCCATGAAGATGGCTTCTCCGGAGAAGACGTGAAACAGTACAAG
CCTGTTGTCTACAGCAACTATCCAGTCCCTGGCAGCCATCGTCCGGGCCATGGACACTTTGGGCATCG
AATATGGTGATAAGGAGAGAAAGCTGACGCCAAGATGGTGTGTGATGTGGTGTGATCGGATGGAAGACAC
CGAGCCCTTCTCTGCAGAGCTGCTTTCTGCCATGATGCGGCTCTGGGGCGACTCAGGAATCCAAGAGTGC
TTCAACCGGTCCCAGGATATCAACTCAACGACTCTGCCAAATACTACCTGGACAGCCTGGATCGGATTG
GGGCCCGGACTACCAGCCCACTGAGCAGGACATCCTCCGAACCAGGGTCAAACCACTGGCATCGTAGA
AACCCACTTCACATTCAAGAACCCTCACTTCAGGCTGTTTGACGTGCGAGGCCAGCGATCTGAACGCAAG
AAGTGGATCCATTGCTTCGAGGACGTACGGCCATCATTTTCTGTGTCGCGCTCAGCGGCTATGACCAGG
TGCTCCACGAAGACGAAACCACGAACCGCATGCACGAATCCCTGAAGCTTTTTGACAGCATCTGCAACAA
CAAATGGTTCACAGACACGTCCATCATCTGTTTCTTAACAAGAAGGACATATTTGAAGAGAAGATCAAG
AAGTCCCGCTCACCATCTGCTTTCCTGAATATACAGGCCCCAGCGCCTCACAGAAGCCGTGGCTTACA
TCCAGGCCAGTACGAGAGCAAGAACAAGTCAGCCCACAAGAGATCTACAGCCAGTCACTGCGGCCAC
GGACACCAACAACATCCAGTTTGTCTTTGATGCTGTGACGGACGTATCATCGCCAAAAACCTGCGGGG
TGTGGACTCTAC

ACCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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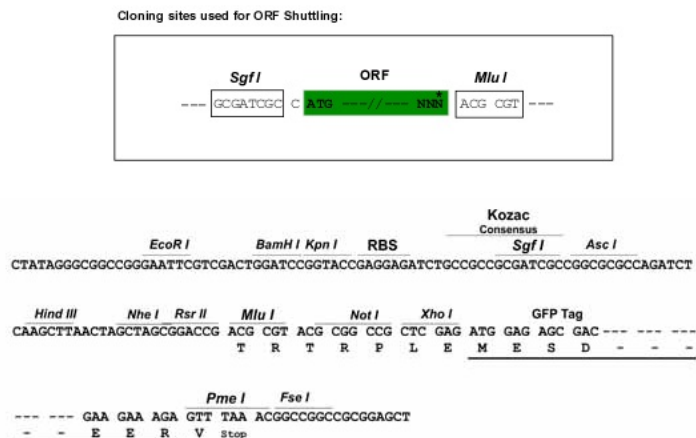
Protein Sequence: >RG215437 representing NM_138736
 Red=Cloning site Green=Tags(s)

MGCTLSAEERAALERSKAIEKNLKEDGISAAKDVKLLLLGAGESGKSTIVKQMKIIHEDGFSGEDVKQYK
 PVVYSNTIQSLAAIVRAMDTLGIEYGDKERKADAKMVCDDVSRMEDTEPFSAELLSAMMRLWGDSGIQEC
 FNRSREYQLNDSAKYYLDSLDRIGAADYQPTAQDILRTRVKTGGIVETHFTFKNLHFRLFDVGGQSRERK
 KWIHCFDVTAIIFCVALSGYDQVLHEDETTNRMHESLKLFDSDICNNKWFDTDSIILFLNKKDIFEKIK
 KSPLTICFPEYTGPSAFTEAVAYIQAQYESKNKSAHKEIYSHVTCATDTNNIQVFVDAVTDVYIIAKNLRG
 CGLY

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_138736

ORF Size: 1062 bp

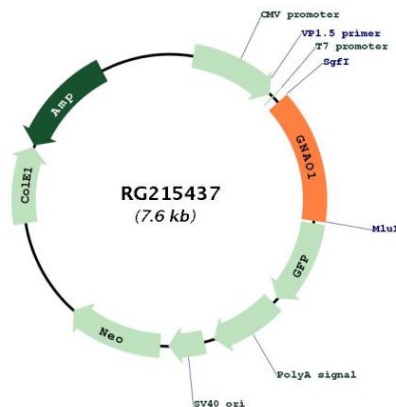
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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 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 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_138736.1](#), [NP_620073.1](#)
- RefSeq Size:** 6229 bp
- RefSeq ORF:** 1065 bp
- Locus ID:** 2775
- UniProt ID:** [P09471](#)
- Cytogenetics:** 16q13
- Protein Families:** Druggable Genome
- Protein Pathways:** Long-term depression, Melanogenesis
- MW:** 40.1 kDa
- Gene Summary:** The protein encoded by this gene represents the alpha subunit of the Go heterotrimeric G-protein signal-transducing complex. Defects in this gene are a cause of early-onset epileptic encephalopathy. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2015]

Product images:



Circular map for RG215437