

## Product datasheet for SC113061

### G0 Protein alpha (GNAO1) (NM\_020988) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	G0 Protein alpha (GNAO1) (NM_020988) Human Untagged Clone
Tag:	Tag Free
Symbol:	G0 Protein alpha
Synonyms:	DEE17; EIEE17; G-ALPHA-o; GNAO; HLA-DQB1; NEDIM
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC113061 sequence for NM_020988 edited (data generated by NextGen Sequencing)

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ATGGGATGTAAGTCTGAGCGCAGAGGAGAGAGCCGCCCTCGAGCGGAGCAAGGCGATTGAG
AAAAACCTCAAAGAGGATGGCATCAGCGCCGCAAAGACGTGAAATTACTCTGCTCGGG
GCTGGAGAATCAGGAAAAAGCACCAATTGTGAAGCAGATGAAGATCATCCATGAAGATGGC
TTCTCCGGAGAAGACGTGAAACAGTACAAGCCTGTTGTCTACAGCAACTATCCAGTCC
CTGGCAGCCATCGTCCGGGCCATGGACACTTTGGGCATCGAATATGGTGATAAGGAGAGA
AAGGCTGACGCCAAGATGGTGTGTGATGTGGTGTGAGTGGATGGAAGACACCGAGCCCTTC
TCTGCAGAGCTGCTTTCTGCCATGATGCGGCTCTGGGGCGACTCAGGAATCCAAGAGTGC
TTCAACCGGTCCCGGGAGTATCAGCTCAACGACTCTGCCAAATACTACCTGGACAGCCTG
GATCGGATTGGGGCCCGGACTACCAGCCCACTGAGCAGGACATCCTCCGAACCAGGGTC
AAAACCACTGGCATCGTAGAAACCACTTACATTCAAGAACCTCCACTTCAGGCTGTTT
GACGTCGGAGGCCAGCGATCTGAACGCAAGAAAGTGGATCCATTGCTTCGAGGACGTCACG
GCCATCATTTTCTGTGTGCGGCTCAGCGGCTATGACCAGGTGCTCCACGAAGACGAAACC
ACGAACCGCATGCACGAGTCTCTCATGCTCTTCGACTCCATCTGTAACAACAAGTTCTTC
ATCGATACCTCCATATTCTCTTCTCAACAAGAAAGATCTCTTTGGCGAGAAGTCAAG
AAGTCACCTTTGACCATCTGCTTTTCTGAATACACAGGCCCAATACCTATGAAGACGCA
GCCGCCTACATCCAAGCACAATTTGAAAGCAAAAACCGCTCACCCAACAAGAAATATAT
TGTCACATGACTTGTGCCACAGACACGAATAACATCCAGGTGGTGTTCGACGCCGTCACC
GACATCATCATTGCCAACACCTCCGGGGCTGCGGCTTGTACTGA

```

Clone variation with respect to NM\_020988.2  
513 c=>t



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**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_020988 unedited  
 TCANGATATTTGTATACGACTTACTATAGNNGCGGCCGCGNAATTCGGCACGAGGGCGG  
 GCTGTGGCAGGGAAGGGGCCACCATGGGATGACTCTGAGCGCAGAGGAGAGAGCCGCC  
 TCGAGCGGAGCAAGGCGATTGAGAAAACTCAAAGAGGATGGCATCAGCGCCGCCAAAG  
 ACGTGAATTACTCCTGCTCGGGGCTGGAGAATCAGGAAAAAGCACCATTGTGAAGCAGA  
 TGAAGATCATCCATGAAGATGGCTTCTCCGGAGAAGACGTGAAACAGTACAAGCCTGTTG  
 TCTACAGCAACACTATCCAGTCCCTGGCAGCCATCGTCCGGGCCATGGACACTTTGGGCA  
 TCGAATATGGTGATAAAGGAGAGAAAGGCTGACGCCAAGATGGTGTGTGATGTGGCGAGTC  
 GGATGGAAGACCCGAGCCCTTCTCTGCAGAGCTGCTTTCTGCCATGATGCGGCTCTGGG  
 GCGACTCAGGAATCCAAGAGTGCTTCAACCGGTCCCGGGAGTATCAGCTCAACGACTCTG  
 CCAAATACTACCTGNACAGCCTGGATCGGATTGGGGCCGCCGACTACCAGCCCACTGAGC  
 AGGACATCCTCCGAACCAGGGTCAAACCACTGGCATCGTAGAAACCACTTCACATTCA  
 AGAACCTTCACTTCAGGCTGTTTACGTCGGAGGCCAGCGATCTGAACGCAAGAAGGGAT  
 CCATTGCTTCGAGGACGTCACGGCCATCATTTCTGTGTCGCGCTCACCGGCTATGACCCA  
 GTGCTCCACGAAGACAAACCCCAACCCGCATGCCGAGTCTCTCATGCTTTCGACTCCT  
 CTGAACAACAAGTCTCATCGATACCTCATCATTCTTTCTCAACAGAAAGATCCCTCT  
 GCCGAGAGAACCAGAAGTCN

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_020988 unedited  
 ACCGCGGCCGCAATCTANAGTCGAGTTTTTTTTTTTTTTTTTTTTTTGTGTGTTTTGTCTTTT  
 GCCTCCTCTTTATTTGAAATGGCTGTGACTGGTCTTCTCAGCAAAGATTAAGTCTTAAA  
 AGTGAAACCGTGAAGAGTTTAGGGTTTGGGTATTAGTCAAAGTAGAAATGACATAGGAT  
 TGGTCATGAAACGGCGGCTTTAATGTAACACTACATTCATCTTTTTAAATTTTTTTTGT  
 TTTTTTTTTTCCATCTTGTGGTATTTAAAAATTTTTTTTTTGTCTTTTTGTCTGCAGCAC  
 AAACATCCCCACATGAGAGAGCGGACACAGGGCACCGAAACAAAGGCAGGGGTGGGGAGG  
 GGCGCACACAGGAGGGAGGTGTGAGCCGGGACCGGAAATCCAACACGGCAAAGGAAAAA  
 AAACACAACCCGTTTCCCAAAGACTAGGAAAACTGATCTGTGGGGTGGGGGGCTGGTAAT  
 ACATAGTACTCGGCGGGACAAAAGTAAAAACAAAACTGAAAAAAAAAAAAAAAAAGGAACCA  
 AAAAACCCCTACAAGGCTATCCTTANAAAGGGGTGGTGGGCANATTGTTTTCTATGG  
 GGCTGGATTTCTTATACGATGGGTGTTCTTTTTGGCAGCTACTGGCCAGTGAGAGCTGT  
 GCTTTTTCTATACCAACTGGAGTGANCGTGTGGCGGGATGGCTTANGGCCCCACAGTG  
 CCTCTGTGGTGTCTGGGCCGCCGACAGGACCAAGGGTTGCAGTGGGCCTGGGGCCTTCT  
 GGAAAAGCCCGCCGAGCCCACTCCTTCGACCTTGACCCGACCGGAACCCAGCGGCAG  
 ATGGGCCCTGCCCCACAGAACTTCAGGGCTTCCCCAAAGGGGAACGGGCCAGCCCGG  
 CCAATAGGTTTTTTTTTTCAAAC

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_020988

**Insert Size:**

2750 bp

**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).

**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\\_020988.1](#), [NP\\_066268.1](#)

**RefSeq Size:** 2215 bp

**RefSeq ORF:** 1065 bp

**Locus ID:** 2775

**UniProt ID:** [P09471](#)

**Cytogenetics:** 16q13

**Domains:** G-alpha

**Protein Families:** Druggable Genome

**Protein Pathways:** Long-term depression, Melanogenesis

**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]  
Transcript Variant: This variant (1) represents the shorter transcript and encodes isoform a.