

## Product datasheet for **RG229876**

### G protein alpha Inhibitor 2 (GNAI2) (NM\_001166425) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	G protein alpha Inhibitor 2 (GNAI2) (NM_001166425) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	G protein alpha Inhibitor 2
Synonyms:	GIP; GNAI2B; H_LUCA15.1; H_LUCA16.1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG229876 representing NM_001166425 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGAGGTGCTGGGGAGTCAGGGAAGAGCACCATCGTCAAGCAGATGAAGATCATCCACGAGGATGGCT  
ACTCCGAGGAGGAATGCCGGCAGTACCGGGCGTTGTCTACAGCAACACCATCCAGTCCATCATGGCCAT  
TGTCAAAGCCATGGGCAACCTGCAGATCGACTTTGCCGACCCCTCCAGAGCGGACGACGCCAGGCAGCTA  
TTTGCAGTGTCTGCACCGCCGAGGAGCAAGGCGTGCTCCCTGATGACCTGTCCGGCGTCATCCGGAGGC  
TCTGGGCTGACCATGGTGTGCAGGCCTGCTTTGGCCGCTCAAGGGAATACCAGCTCAACGACTCAGCTGC  
CTACTACCTGAACGACCTGGAGCGTATTGCACAGAGTGACTACATCCCCACACAGCAAGATGTGCTACGG  
ACCCGCGTAAAGACCACGGGGATCGTGGAGACACACTTCACTTCAAGGACCTACTTCAAGATGTTTTG  
ATGTGGGTGGTCAGCGGTCTGAGCGGAAGAAGTGGATCCACTGCTTTGAGGGCGTCACAGCCATCATCTT  
CTGCGTAGCCTTGAGCGCCTATGACTTGGTGCTAGCTGAGGACGAGGAGATGAACCGCATGCATGAGAGC  
ATGAAGCTATTCGATAGCATCTGCAACAACAAGTGGTTCACAGACACGTCCATCATCCTCTTCTCAACA  
AGAAGGACCTGTTTGAGGAGAAGATCACACACAGTCCCCTGACCATCTGTTCCCTGAGTACACAGGGGC  
CAACAAATATGATGAGGCAGCCAGCTACATCCAGAGTAAGTTTGAGGACCTGAATAAGCGCAAAGACACC  
AAGGAGATCTACACGCACTTACGTGCCACCCGACACCAAGAAGTGCAGTTTCGTGTTTGACGCCGTCA  
CCGATGTATCATCAAGAACAACCTGAAGGACTGCGGCCTCTTC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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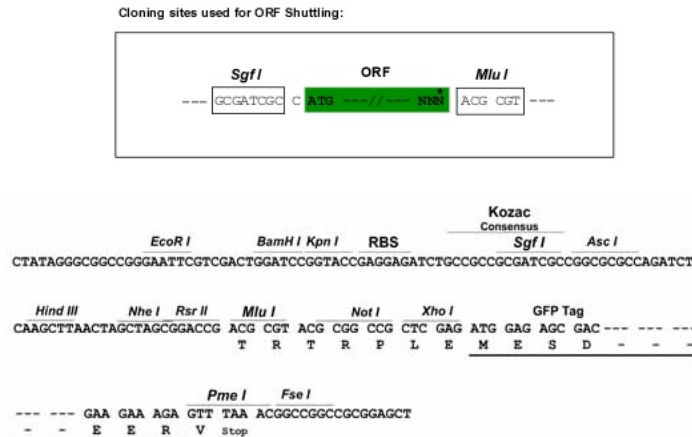
**Protein Sequence:** >RG229876 representing NM\_001166425  
 Red=Cloning site Green=Tags(s)

MRGAGESGKSTIVKQMKIIHEDGYSEEECRQYRAVVYSNTIQSIMAIVKAMGNLQIDFADPSRADDARQL  
 FALSCTAEEQGVLPDDL SGVIRRLWADHGVQACFGRSREYQLNDSAAYLNDLERIAQSDYIPTQQDVLRL  
 TRVKTTGIVETHFTFKDLHFKMFDVGGQRSERKKWIHCFEGVTAIIFCVALSAYDLVLAEDEEMNRMHES  
 MKLFDSICNNKWFDTSTIILFLNKKDLFEEKITHSPLTICFPEYTGANKYDEAASYIQSKFEDLNKRKDT  
 KEIYTHFTCATDTKNVQFVFDVAVTDVVIKNNLKDCGLF

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001166425

**ORF Size:** 954 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\\_001166425.2](#)

**RefSeq Size:** 2143 bp

**RefSeq ORF:** 957 bp

**Locus ID:** 2771

**UniProt ID:** [P04899](#)

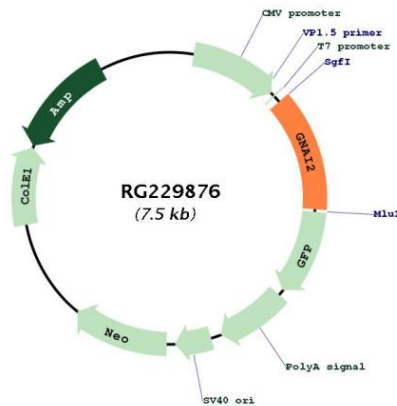
**Cytogenetics:** 3p21.31

**Protein Families:** Druggable Genome

**Protein Pathways:** Axon guidance, Chemokine signaling pathway, Gap junction, Leukocyte transendothelial migration, Long-term depression, Melanogenesis, Progesterone-mediated oocyte maturation, Tight junction

**Gene Summary:** The protein encoded by this gene is an alpha subunit of guanine nucleotide binding proteins (G proteins). The encoded protein contains the guanine nucleotide binding site and is involved in the hormonal regulation of adenylate cyclase. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2013]

**Product images:**



Circular map for RG229876