

Product datasheet for **RG221095**

GNAT1 (NM_000172) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	GNAT1
Synonyms:	CSNBIG; CSNBAD3; GBT1; GNATR
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG221095 representing NM_000172
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCTGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGGGGGCTGGGGCCAGTGCTGAGGAGAAGCACTCCAGGGAGCTGGAAAAGAAGCTGAAAGAGGACGCTG
AGAAGGATGCTCGAACCGTGAAGCTGCTGCTTCTGGGTGCCGGTGAAGTCCGGGAAGAGCACCATCGTCAA
GCAGATGAAGATTATCCACGAGACGGGTACTCGCTGGAAGAGTGCCTCGAGTTATCGCCATCATCTAC
GGCAACACGTTGCAGTCCATCCTGGCCATCGTACGCGCCATGACCACACTCAACATCCAGTACGGAGACT
CTGCACGCCAGGACGACGCCCGGAAGCTGATGCACATGGCAGACACTATCGAGGAGGGCACGATGCCCAA
GGAGATGTCGGACATCATCCAGCGGCTGTGGAAGGACTCCGGTATCCAGGCCTGTTTGGAGCGCGCTCG
GAGTACCAGCTCAACGACTCGGCGGGCTACTACCTCTCCGACCTGGAGCGCCTGGTAACCCCGGGCTACG
TGCCCAACGAGCAGGACGTGCTGCGCTCGCGAGTCAAGACCACTGGCATCATCGAGACGAGTTCTCCTT
CAAGGATCTCAACTCCGGATGTTCTGATGTGGCGGGCAGCGCTCGAGCGCAAGAAGTGATCCACTGC
TTCGAGGGCGTGACCTGCATCATCTTCATCGCGCGCTGAGCGCCTACGACATGGTGCTAGTGGAGGACG
ACGAAGTGAACCGCATGCACGAGAGCCTGCACCTGTTCAACAGCATCTGAACCAACCGCTACTTCGCCAC
GACGTCCATCGTGCTCTTCCTTAACAAGAAGGACGTCTTCTCGAGAAGATCAAGAAGGCGCACCTCAGC
ATCTGTTTCCCGGACTACGATGGACCAACACCTACGAGGACGCCGCAACTACATCAAGGTGCAGTTCC
TCGAGCTCAACATGCGGCGCGAGCTGAAGGAGATCTATTCCACATGACGTGCGCCACCGACACGCAGAA
CGTCAAATTTGCTTCGACGCTGTACCGACATCATCATCAAGGAGAACCTCAAAGACTGTGGCCTCTTC
TG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



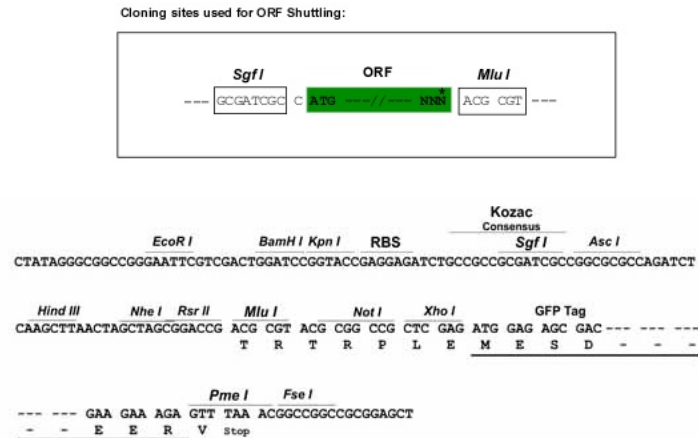
Protein Sequence: >RG221095 representing NM_000172
 Red=Cloning site Green=Tags(s)

MGAGASAEKHSRELEKKLKEDAEDARTVKLLLLGAGESGKSTIVKQMKIIHQDGSLEECLEFIAIIY
 GNTLQSILAIVRAMTTLNIQYGDSARQDDARKLMHMADTIEEGTMPKEMSDIIQRLWKDSGIQACFERAS
 EYQLNDSAGYYLSDLERLVTPGYVPTQDVLRSRVKTTGIIETQFSKDLNFRMFDVGGQRSEKWKIHC
 FEGVTCIIFIAALSAYDMVLVEDDEVNRMHESLHLFNSICNHRYFATTSIVLFLNKKDVFEEKIKKAHLS
 ICFPDYDGPNTYEDAGNYIKVQFLELNMRDVKIYSHMTCATDTQNVKFVFDVTDIIKENLKDGLF

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000172

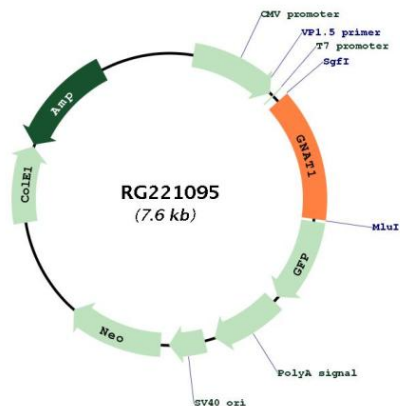
ORF Size: 1052 bp

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:	<ol style="list-style-type: none"> 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_000172.2</u> , <u>NP_000163.2</u>
RefSeq Size:	1284 bp
RefSeq ORF:	1053 bp
Locus ID:	2779
UniProt ID:	<u>P11488</u>
Cytogenetics:	3p21.31
Protein Families:	Druggable Genome
Gene Summary:	Transducin is a 3-subunit guanine nucleotide-binding protein (G protein) which stimulates the coupling of rhodopsin and cGMP-phosphodiesterase during visual impulses. The transducin alpha subunits in rods and cones are encoded by separate genes. This gene encodes the alpha subunit in rods. This gene is also expressed in other cells, and has been implicated in bitter taste transduction in rat taste cells. Mutations in this gene result in autosomal dominant congenital stationary night blindness. Multiple alternatively spliced variants, encoding the same protein, have been identified. [provided by RefSeq, Feb 2009]

Product images:



Circular map for RG221095