

Product datasheet for **SC300019**

GNAT1 (NM_000172) Human Untagged Clone

Product data:

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|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | GNAT1 (NM_000172) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | GNAT1 |
| Synonyms: | CSNB1G; CSNBAD3; GBT1; GNATR |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| Fully Sequenced ORF: | >SC300019 representing NM_000172. Blue=Insert sequence Red=Cloning site Green=Tag(s) |

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GCTCGTTTAGTGAACCGTCAGAATTTGTAAACGACTACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGGGCTGGGGCCAGTCTGAGGAGAAGCACTCCAGGGAGCTGGAAAAGAAGCTGAAAGAGGACGCT
GAGAAGGATGCTCGAACCGTGAAGCTGCTGCTTCTGGGTGCCGGTGAAGTCCGGGAAGAGCACCATCGTC
AAGCAGATGAAGATTATCCACCAGGACGGGTACTCGTGGAAAGAGTGCCTCGAGTTTATCGCCATCATC
TACGGCAACACGTTGCAGTCCATCCTGGCCATCGTACGCGCCATGACCACACTCAACATCCAGTACGGA
GACTCTGCACGCCAGGACGACGCCCGGAAGCTGATGCACATGGCAGACACTATCGAGGAGGGCAGATG
CCCAAGGAGATGTCGGACATCATCCAGCGGCTGTGGAAGGACTCCGGTATCCAGGCCTGTTTGGAGCGC
GCCTCGGAGTACCAGCTCAACGACTCGGCGGGCTACTACCTCTCCGACCTGGAGCGCCTGGTAACCCCG
GGCTACGTGCCACCGAGCAGGACGTGCTGCGCTCGCGAGTCAAGACCACTGGCATCATCGAGACGAG
TTCTCCTTCAAGGATCTCAACTTCCGGATGTTTCGATGTGGGCGGGCAGCGCTCGGAGCGCAAGAAGTGG
ATCCACTGCTTTCGAGGGCGTGACCTGCATCATCTTCATCGCGCGCTGAGCGCCTACGACATGGTGCTA
GTGGAGGACGACGAAGTGAACCGCATGCACGAGAGCCTGCACCTGTTCAACAGCATCTGCAACCACCGC
TACTTCGCCACGACGTCATCGTCTTCTTAAACAAGAAGGACGTCTTTCGAGAAGATCAAGAAG
GCGCACCTCAGCATCTGTTTCCCGGACTACGATGGACCAACACCTACGAGGACGCCGCAACTACATC
AAGGTGCAGTTCTCGAGCTCAACATGCGGCGCGACGTGAAGGAGATCTATTCCACATGACGTGCCCC
ACCGACACGAGAACGTCAAATTTGTCTTCGACGCTGTACCCGACATCATCATCAAGGAGAACCTCAA
GACTGTGGCCTCTTTGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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| Restriction Sites: | Sgfl-MluI |
| ACCN: | NM_000172 |



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| Insert Size: | 1053 bp |
| OTI Disclaimer: | <p>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.</p> <p>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</p> |
| OTI Annotation: | This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA. |
| 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. |
| RefSeq: | NM_000172.3 |
| RefSeq Size: | 2483 bp |
| RefSeq ORF: | 1053 bp |
| Locus ID: | 2779 |
| UniProt ID: | P11488 |
| Cytogenetics: | 3p21.31 |
| Protein Families: | Druggable Genome |
| MW: | 40 kDa |

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]

Transcript Variant: This variant (2) differs in the 3' UTR compared to variant 1. Variants 1 and 2 encode the same protein. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.