

## Product datasheet for **MC203321**

### **Gnat1 (NM\_008140) Mouse Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Gnat1 (NM_008140) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Gnat1
Synonyms:	Gnat-1; Ird1; Ird2; irdc; irdr; Tralpha; transducin
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)



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**Fully Sequenced ORF:** >BC058810  
 GGCCAGAAGGTCGTCTGAGGAGGCCGGGGAGGCTGCCTACCCTGTCCCTTTGCCTGCTGCTGGGACCATG  
 GGGGCTGGGGCCAGCGCTGAGGAGAAGCACTCCAGAGAGCTGGAGAAGAAGCTGAAAGAGGATGCTGAGA  
 AGGATGCCCGCACTGTGAAACTGCTGCTTCTGGGTGCCGGTGAATCCGGGAAGAGCACTATTGTCAAACA  
 GATGAAGATTATCCACCAGGACGGGTATTCGCTGGAGGAATGCCTCGAGTTCATTGCCATCATCTACGGC  
 AACACTCTGCAGTCCATCCTGGCCATCGTTCGGGCTATGACCACGCTCAACATTAGTATGGAGATTGAG  
 CCGGCGAGGATGATGCCCGAAGCTCATGCACATGGCAGATACTATTGAGGAAGGCACAATGCCCAAGGA  
 GATGTGACACATCATTACAGCGCTTGTGGAAGGACTCGGGTATCCAAGCTTGCTTTGACCGAGCCTCAGAA  
 TACCAGCTCAATGACTCCGCCGGCTACTATCTCTCAGACCTAGAGCGTCTGGTACTCCAGGATATGTGC  
 CCACTGAGCAGGACGTGTTGCGTTCCTGTGTCAAAACCACTGGTATTATCGAGACTCAATTCTCCTTCAA  
 GGACCTCAACTTCAGAATGTTTCGATGTGGGCGGGCAGCGTTCGAGCGCAAAAAGTGGATCCACTGCTTT  
 GAGGGTGTGACGTGCATCATTTTCATCGCTGCGCTGAGCGCTTACGACATGGTGTGTTGGAGGACGACG  
 AAGTGAACCGAATGCACGAGAGCCTGCACCTGTTCAACAGCATCTGCAATCATCGCTACTTCGCCACAAC  
 GTCTATCGTGCTTCTCCTCAACAAGAAGGACGTTTTCTCCGAGAAGATAAAAAAGGCACACCTCAGCATC  
 TGCTTCCCGACTACGATGGACCTAACACTTACGAGGATGCCGGCACTACATCAAAGTGCAGTTCTCTGG  
 AGCTTAAACATGCGACGTGATGTGAAGGAGATCTATCCACATGACGTGCCCTACCAGACACAGAACGT  
 CAAGTTTGTCTTTGACGCTGTCACCGACATTATCATCAAGGAGAACCTCAAAGACTGCGGGCTCTTCTGA  
 GGTACCTGAATTCAGGTGTGCTCTTGCCTGAGATTCTGTAGCCCTGCAGCCCTGTAGCCCTGTAGTCC  
 CCTCAAATACCGTCTTTCCACAAGCTGCTGCTTGTAGCCACACACCCAAAGGCATGAGGCTTGCACT  
 GCAGACCTCCCCAAGTACCAACTCGACCTGCTTTTACCGCCTGGCTGACTGGCCTCTTGGACCT  
 ACAGCAGCCAGCTGAGCTAGGACACCTCAGGACTTGGGACAGCTGGAATCACAGTGACTCAGCAGTGC  
 CCTAGTGACCCGCTGTCTCCAGCCTCTTCTGCTACCCCAAGCAGCAGCAGCAGCTCACCAGCAGATCCC  
 CATTCCACAACAGCCCTCCCTCACCAGTTTCCACGAAGGACTTGAGGTATCCCTCCCTCAAGCAGTAGG  
 CCGGTCCAGCCTGCTACCTGCATATGACAAGTCCAACACGTGTCCACCCAGTGGTTAGTGACTGTCCCTC  
 CAGTAGCCTGAGGACTCAAAGTCCAAGCTCTGGTTTTTGAAGCCTCGTATAGAGAAGTGAAGTACTTT  
 GACGTGGGTGCCAGGAAAGAAAGACACAAGCCAAACCCATTCCCGAACATCAGACTCAGGGTTTCTCCA  
 GTCCCTTCTCCCTCTGGGTCTTGCCCTCTGTCTTGGACTTCCACACCACACCTCATCCACCCACAC  
 ACAATACTCAGGGCTGGCTGGTCAAGGTATGCTGTATTGAAGGAGGGTATTATTGACATAGCTATGACCA  
 ATAATGAAGCCATGCTGAGGGTGGCTCAGAGCAGAGTCCAACCCCTATTGATCAACCATGGGCAAAAGAA  
 TATCCCATGTGAGGTTACAGGCAATTCATGTGACCATGTTGTCCTCCTGATTCAGGGCCATTCTTA  
 GGAGGGGAACTGAAAACCAGGCCTAAACCATTAGAGACAATGTCCCAACCCCAAGCCACTTCTACAA  
 CCTTTGCTTAAGCCTGTGACCAGAGCCAGTGCTGCTGGAAGAGGCAAGATGCTTCTGGACAGCAAGACT  
 AGGGCACAACTCTCCCTCCCTTAGCTAGCTGCAGACTCAGCAATAAACCTTTGCACCAGAAAAA AAAAA

**Restriction Sites:** RsrII-NotI

**ACCN:** NM\_008140

**Insert Size:** 1053 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:** [BC058810](#), [AAH58810](#)

**RefSeq Size:** 2245 bp

**RefSeq ORF:** 1053 bp

**Locus ID:** 14685

**UniProt ID:** [P20612](#)

**Cytogenetics:** 9 58.86 cM

**Gene Summary:** Functions as signal transducer for the rod photoreceptor RHO. Required for normal RHO-mediated light perception by the retina (By similarity). Guanine nucleotide-binding proteins (G proteins) function as transducers downstream of G protein-coupled receptors (GPCRs), such as the photoreceptor RHO. The alpha chain contains the guanine nucleotide binding site and alternates between an active, GTP-bound state and an inactive, GDP-bound state. Activated RHO promotes GDP release and GTP binding. Signaling is mediated via downstream effector proteins, such as cGMP-phosphodiesterase (By similarity).[UniProtKB/Swiss-Prot Function]