

## Product datasheet for RC200685

### GNAT2 (NM\_005272) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GNAT2 (NM_005272) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GNAT2
Synonyms:	ACHM4; GNATC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200685 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGAAGTGGAGCCAGTCTGAGGACAAAGAAGTGGCCAAGAGGTCCAAGGAGCTAGAAAAGAAGCTGC  
AGGAGGATGCTGATAAGGAAGCCAAGACTGTCAAGCTGCTACTGCTGGGTGCTGGGGAGTCAGGAAAGAG  
CACCATCGTCAAACAGATGAAGATCATTACCAGGATGGCTATTCACCAGAAGAATGCCTGGAGTTCAG  
GCTATCATCTATGAAAATGTGCTGCAGTCCATCCTGGCTATCATCCGGGCCATGACCACACTGGGCATCG  
ATTATGCTGAACCAAGCTGTGCGGATGACGGGCGACAGCTCAACAACCTGGCTGACTCCATTGAGGAGGG  
AACCATGCCTCCTGAGCTCGTGGAGTCAATAGGAGGTTGTGGAAGGATGGTGGGGTCAAGCCTGCCTC  
GAGAGAGCTGCAGAAATACCAGCTTAATGACTCCGCATCTTACTACCTGAACCAATTAGAACGAATTACAG  
ACCCTGAGTACCTCCCTAGTGAGCAAGATGTGCTCCGATCCAGAGTCAAAACCACAGGCATCATTGAAAC  
CAAGTTTTCCGTCAAAGACTTGAATTTCCAGGATGTTTGTGTGGGAGGGCAGAGATCCGAGAGAAAGAG  
TGGATCCACTGCTTCGAGGGAGTCACCTGCATCATTTCTGTGCAGCCCTCAGTGCTATGATATGGTGC  
TGGTGAAGATGACGAAGTGAATCGATGCATGAGTCTTGTCACTGTTCACAGCATATGTAACCACAA  
ATCTTTGCGGCTACTTCCATTGCTCTTTCTCAACAAGAAGGACCTCTTTGAGGAAAAATCAAGAAA  
GTCCATCTCAGATTTGTTTTCCAGAGTATGATGGTAACAACCTCCTATGATGATGCGGGGAATTACATA  
AGAGCCAGTTCCTTGACCTCAATATGCGAAAAGATGTCAAAGAAATCTACAGTCACATGACCTGTGCTAC  
AGATACACAGAATGTCAAATTTGTGTTGATGCAGTTACAGATATTATCATCAAAGAAAACCTCAAGGAC  
TGCGGCCTCTTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA



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**Protein Sequence:** >RC200685 protein sequence  
Red=Cloning site Green=Tags(s)

MGSGASAEDKELAKRSKELEKLLQEDADKEAKTVKLLLLGAGESGKSTIVKQMKIIHQDGYSPPECLEFK  
 AIIYGNVLQSILAIIRAMTTLGIDYAEPSCADDGRQLNLLADSIIEGTMPPPELVEVIRRLWKDGGVQACF  
 ERAAEYQLNDSASYLLNQLERITDPEYLPSEQDVLRSRVKTTGIETKFSVKDLNFRMFDVGGQRSERKK  
 WIHCFEGVTCIIFCAALSAYDMVLVEDDEVNRMHESLHLFNSICNHKFFAATSIVLFLNKKDLFEKIKK  
 VHLSICFPEYDGNNSYDDAGNYIKSQFLDLNMRKDVKEIYSHMTCATDTQNVKVFVDAVTDIIKENLKD  
 CGLF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6071\\_b12.zip](https://cdn.origene.com/chromatograms/mk6071_b12.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_005272

**ORF Size:** 1062 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\\_005272.1](#)

**RefSeq Size:** 1384 bp

**RefSeq ORF:** 1065 bp

**Locus ID:** 2780

**UniProt ID:** [P19087](#)

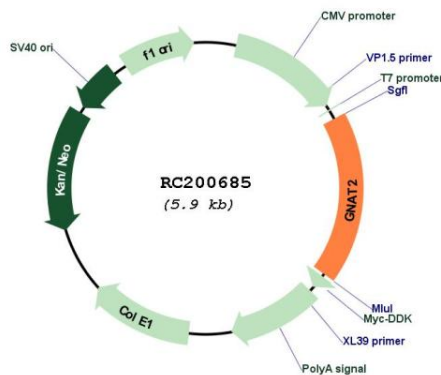
**Cytogenetics:** 1p13.3

**Protein Families:** Druggable Genome

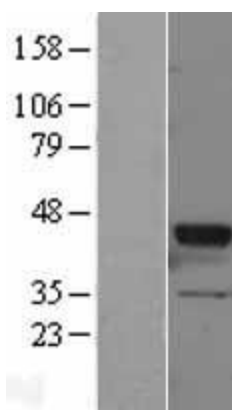
**MW:** 40.2 kDa

**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 cones. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RC200685



Western blot validation of overexpression lysate (Cat# [LY401620]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200685 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GNAT2 protein (Cat# [TP300685]). The protein was produced from HEK293T cells transfected with GNAT2 cDNA clone (Cat# RC200685) using MegaTran 2.0 (Cat# [TT210002]).