

## Product datasheet for **RG237565**

### GNB3 (NM\_001297571) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GNB3 (NM_001297571) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GNB3
Synonyms:	CSNB1H
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG237565 representing NM_001297571. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC CGGATCGCC
ATGGGGGAGATGGAGCAACTGCGTCAGGAAGCGGAGCAGCTCAAGAAGCAGATTGCAGATGCCAGGAAA
GCCTGTGCTGACGTTACTCTGCCAGAGCTGGTGTCTGGCCTAGAGGTGGTGGGACGAGTCCAGATGCGG
ACGCGGCGGACGTTAAGGGGACACCTGGCCAAGATTTACGCCATGCACTGGGCCACTGATTCTAAGCTG
CTGGTAAGTGCCTCGAAGATGGGAAGCTGATCGTGTGGGACAGCTACACCACCAACAAGGTGCACGCC
ATCCCACTGCGCTCCTCCTGGGTCATGACCTGTGCCTATGCCCCATCAGGGAAC TTTGTGGCATGTGGG
GGGCTGGACAACATGTGTTCCATCTACAACCTCAAATCCCGTGAGGGCAATGTCAAGGTCAGCCGGGAG
CTTTCTGCTCACACAGGTTATCTCTCCTGCTGCCGCTTCCTGGATGACAACAATATTGTGACCAGCTCG
GGGACACCACTGCCTTGTGGGACATTGAGACTGGGCAGCAGAAGACTGTATTTGTGGGACACACGGGT
GACTGCATGAGCCTGGCTGTGTCTCCTGACTTCAATCTCTTCAATTTGGGGGCTGTGATGCCAGTGCC
AAGCTCTGGGATGTGCGAGAGGGGACCTGCCGTCAGACTTTCCTGAGCCAGAGTCCGGACATCAACGCC
ATCTGTTTCTTCCCAATGGAGAGGCCATCTGCACGGGCTCGGATGACGCTTCTGCCGCTTGTGTTGAC
CTGCGGGCAGACCAGGAGCTGATCTGCTTCTCCACGAGAGCATCATCTGCGGCATCAGTCCGTTGGCC
TTCTCCCTCAGTGGCCGCTACTATTGCTGGCTACGACGACTTCACTGCAATGTCTGGGACTCCATG
AAGTCTGAGCGTGTGGGATCCTCTGCGCCAGGATAACAGGGTGAGCTGCCTGGGAGTCACAGCTGAC
GGGATGGCTGTGGCCACAGGTTCTGGGACAGCTTCTCAAATCTGGAAC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



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**Protein Sequence:** >Peptide sequence encoded by RG237565  
 Blue=ORF Red=Cloning site Green=Tag(s)

MGEMQLRQAEQLKKQIADARKACADVTLAELVSGLEVGRVQMRTRRTLGRHLAKIYAMHWATDSKL  
 LVSASQDGKLIWDSYTTNKVHAIPLRSSWVMTCAYPNSGNFVACGLDNMCSIYNLKSREGNVKVSRE  
 LSAHTGYLSCCRFLDNNIVTSSGDTTALWDIETGQOKTVFVGHGTDCMSLAVSPDFNLFISGACDASA  
 KLWDVREGTCRQFTFGHESDINAICFFPNGEAICTGSDDASCRLFDLRADQELICFSHESIICGITSVA  
 FLSLGRLLFAGYDDFNCAVWDSMKSERVGI LSGHDNRVSLGVTADGMAVATGSWDSFLKIWN  
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPYSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001297571

**ORF Size:** 1017 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).

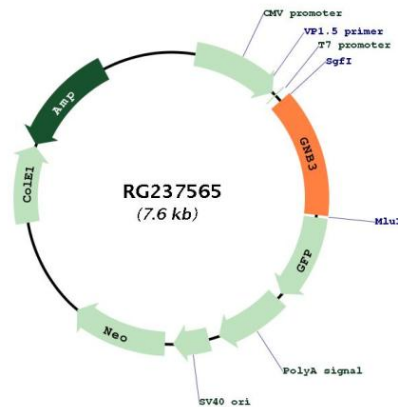
**RefSeq:** [NM\\_001297571.2](#)

**RefSeq Size:** 1757 bp

**RefSeq ORF:** 1020 bp

Locus ID:	2784
UniProt ID:	<a href="#">P16520</a>
Cytogenetics:	12p13.31
Protein Families:	Druggable Genome
Protein Pathways:	Chemokine signaling pathway, Taste transduction
MW:	37.6 kDa
Gene Summary:	<p>Heterotrimeric guanine nucleotide-binding proteins (G proteins), which integrate signals between receptors and effector proteins, are composed of an alpha, a beta, and a gamma subunit. These subunits are encoded by families of related genes. This gene encodes a beta subunit which belongs to the WD repeat G protein beta family. Beta subunits are important regulators of alpha subunits, as well as of certain signal transduction receptors and effectors. A single-nucleotide polymorphism (C825T) in this gene is associated with essential hypertension and obesity. This polymorphism is also associated with the occurrence of the splice variant GNB3-s, which appears to have increased activity. GNB3-s is an example of alternative splicing caused by a nucleotide change outside of the splice donor and acceptor sites. Alternative splicing results in multiple transcript variants. Additional alternatively spliced transcript variants of this gene have been described, but their full-length nature is not known. [provided by RefSeq, Jul 2014]</p>

## Product images:



Circular map for RG237565