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Product datasheet for RC237565

GNB3 (NM_001297571) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GNB3 (NM_001297571) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GNB3
Synonyms:	CSNB1H
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC237565 representing NM_001297571 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGGGGAGATGGAGCAACTGCGTCAGGAAGCGGAGCAGCTCAAGAAGCAGATTGCAGATGCCAGGAAAG CCTGTGCTGACGTTACTCTGGCAGAGCTGGTGTCTGGCCTAGAGGTGGTGGGACGAGTCCAGATGCGGAC GCGGCGGACGTTAAGGGGACACCTGGCCAAGATTTACGCCATGCACTGGGCCACTGATTCTAAGCTGCTG GTAAGTGCCTCGCAAGATGGGAAGCTGATCGTGTGGGACAGCTACACCACCAACAAGGTGCACGCCATCC CACTGCGCTCCTCCTGGGTCATGACCTGTGCCTATGCCCCATCAGGGAACTTTGTGGCATGTGGGGGGCT GGACAACATGTGTTCCATCTACAACCTCAAATCCCGTGAGGGCAATGTCAAGGTCAGCCGGGAGCTTTCT GCTCACACAGGTTATCTCTCCTGCTGCCGCTTCCTGGATGACAACAATATTGTGACCAGCTCGGGGGACA CCACTGCCTTGTGGGACATTGAGACTGGGCAGCAGAAGACTGTATTTGTGGGACACACGGGTGACTGCAT GAGCCTGGCTGTGTCTCCTGACTTCAATCTCTTCATTTCGGGGGCCTGTGATGCCAGTGCCAAGCTCTGG GATGTGCGAGAGGGGACCTGCCGTCAGACTTTCACTGGCCACGAGTCGGACATCAACGCCATCTGTTTCT TCCCCAATGGAGAGGCCATCTGCACGGGCTCGGATGACGCTTCCTGCCGCTTGTTTGACCTGCGGGCAGA CCAGGAGCTGATCTGCTTCTCCCACGAGAGCATCATCTGCGGCATCACGTCCGTGGCCTTCTCCCTCAGT GGCCGCCTACTATTCGCTGGCTACGACGACTTCAACTGCAATGTCTGGGACTCCATGAAGTCTGAGCGTG TGGGCATCCTCTCTGGCCACGATAACAGGGTGAGCTGCCTGGGAGTCACAGCTGACGGGATGGCTGTGGC CACAGGTTCCTGGGACAGCTTCCTCAAAATCTGGAAC ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

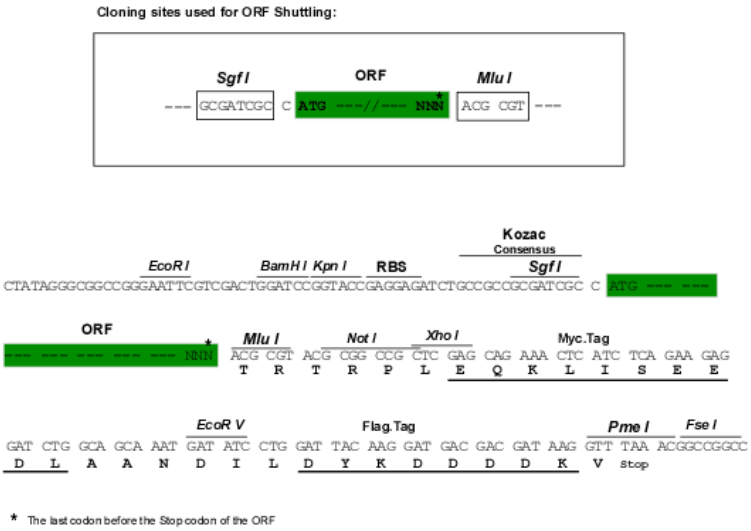
>RC237565 representing NM_001297571
Red=Cloning site Green=Tags(s)

MGEMEQLRQEAEQLKKQIADARKACADVTLAELVSGLEVVGRVQMRTRRTLRGHLAKIYAMHWATDSKLL
VSASQDGKLIVWDSYTTNKVHAIPLRSSWVMTCAYAPSGNFVACGGLDNMCSIYNLKSREGNVKVSRELS
AHTGYLSCCRFLDDNNIVTSSGDTTALWDIETGQQKTVFVGHTGDCMSLAVSPDFNLFISGACDASAKLW
DVREGTCRQTFTGHESDINAICFFPNGEAICTGSDDASCRLFDLRADQELICFSHESIICGITSVAFSLS
GRLLFAGYDDFNCNVWDSMKSERVGILSGHDNRVSCLGVTADGMAVATGSWDSFLKIWN

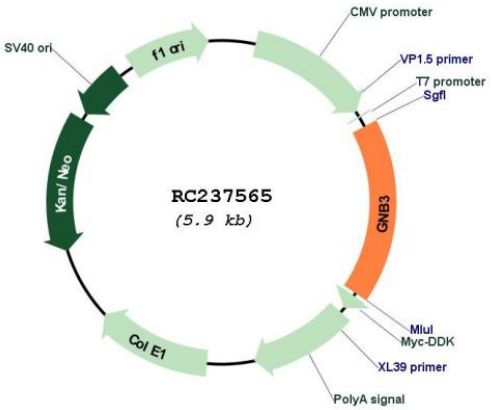
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



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).
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_001297571.2
RefSeq Size:	1757 bp
RefSeq ORF:	1020 bp
Locus ID:	2784
UniProt ID:	P16520
Cytogenetics:	12p13.31
Protein Families:	Druggable Genome
Protein Pathways:	Chemokine signaling pathway, Taste transduction
MW:	37.6 kDa
Gene Summary:	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]