

Product datasheet for **SC118812**

GNB1 (NM_002074) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GNB1 (NM_002074) Human Untagged Clone
Tag:	Tag Free
Symbol:	GNB1
Synonyms:	MDS; MRD42
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

>OriGene sequence for NM_002074 edited
 GAATTCGGCACGAGGCCGCGACGAGGGCGCTGAGACAAATTTACATGTATTGGAGACCAG
 ACCAGAAGCCCTTCTGAATTAAGATCTCACATTCTTGAAGGTGGCATTGAAGAGCACTAA
 GATCGGAAGATGAGTGAGCTTGACCAGTTACGGCAGGAGGCCGAGCAACTTAAGAACCAG
 ATTCGAGACGCCAGGAAAGCATGTGCAGATGCAACTCTCTCTCAGATCACAAACAACATC
 GACCCAGTGGGAAGAATCCAAATGCGCACGAGGAGGACACTGCGGGGGCACCTGGCCAAG
 ATCTACGCCATGCATGGGGCACAGACTCCAGGCTTCTCGTCAGTGCCTCGCAGGATGGT
 AAACCTTACATCTGGGACAGCTACACCACCAACAAGGTCCACGCCATCCCTCTGCGCTCC
 TCCTGGGTCATGACCTGTGCATATGCCCTTCTGGGAACATATGTGGCCTGCGGTGGCCTG
 GATAACATTTGCTCCATTTACAATCTGAAAACCTCGTGAGGGGAACGTGCGCGTGAGTCGT
 GAGCTGGCAGGACACACAGGTTACCTGTCTGCTGCCGATTCTGGATGACAATCAGATC
 GTCACCAGCTCTGGAGACACCACGTGTGCCCTGTGGGACATCGAGACCGGCCAGCAGACG
 ACCACGTTTACCGGACACACTGGAGATGTCATGAGCCTTCTCTTGCTCCTGACACCAGA
 CTGTTCTGTCTGCTGTGTGATGCTTACGCCAAACTCTGGGATGTGCGAGAAGGCATG
 TGCCGGCAGACCTTCACTGGCCACGAGTCTGACATCAATGCCATTTGCTTCTTCCAAAT
 GGCAATGCATTTGCCACTGGCTCAGACGACGCCACCTGCAGGCTGTTGACCTTCGTGCT
 GACCAGGAGCTCATGACTTACTCCCATGACAACATCATCTGCCGGATCACCTCTGTCTCC
 TTCTCAAAGAGCGGGCGCCTCCTCCTTGGTACGACGACTTCAACTGCAACGCTCGG
 GATGCACTCAAAGCCGACCGGGCAGGTGTCTTGGCTGGGCATGACAACCGCTCAGCTGC
 CTGGGCGTGACTGACGATGGCATGGCTGTGGGCACAGGGTCTGGGATAGCTTCTCAAG
 ATCTGGAATAACGCCAGTAGCATGTGGATGCCATGGAGACTGGAAGACCATTCCAATT
 GGACGCGTTACCATGAGAGCATATCCTATCCAACCGTACTAACGTGGACACCCTACACCT
 CCCCTCAGAACTTCAAAGGGCAAGATCTTTTTCTTCACTTATTGCTGAAACCAAGAG
 CACAATTCCTTGGAGAGAAAGATCTGTGCTGTAACCTAAAACAAATTTGTGCATTCCT
 TCCGGGGCCATCGTCTTTGTTTTTTTTGTCTTGAATGAATTTTAAAAGGAAATATAT
 AATAAAAATGTTAACCAGAAGGTAACCTTGAAGTGAATTTGTCAGACAGACACACTTTTCC
 ACCAGTGTATTTGAATTTAGACCAGTGACCCTGTTTTGTGGCATTTCATGCAAAACATGC
 TGAGGGCTTTGTTTCATCTGGTTCATCGTGTCCAAATTTTCAGTCATGTTTGTAGCAAGATT
 TGAAGCATTTCATTTCTTTTTAAAATGTATTCCTTTGTGTTCAACAGTTAATCAAAA
 CCAGAGAGTCTAGGGCAGCCTCTCTGATGTTGTAATGATGTAATTCAGTCCCTGGTTT
 TTAATTTTCTGTCTGATGTCACAGATCATTGTTGCACACAAACGTGGCATAGAAAAGAAC
 ATGTTTCAGAAGCCATGGGGCCAAGCACATGCGGGGACGGTCTCAAATGCGTGATCAGAGA
 ATCCTTACCTTTGCTGAAAAGTGAGCTCAGATCCAGCACCATGTTCTCCTGACCCATC
 CTGTCTATCTTCTCAGTTGAGTTTTAATCTCACTTTGGGTTTCCTTGTGAAGTTGGAGG
 GAAGTTTATAATAGCCTAACACTACCCACCCCAACTAGGAGGAACCTCTGTTTTCAAG
 AGAGATGCCTGTCTGTGCTTGGATAGTCAGTCAATATTTGTGTATGAAACAATGTACA
 AATCAATGTTTTGAAAATAATGATCTCAGACTTCTAAGTTAAATTTTAAAAATTTTGT
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 TAACCATTGCGGCTCTGTCCACTTCTCGTTGCTGCTGTGGCACATATCGGAAGCAGTA
 CAGCGCGCGGCTCTACACGCTTGGGTAGCGGGATAAGTCACTGTTTTCTTTATTTCTTTA
 AAAAAAAAAAAGTTCTGTTGCAAACGACTGCTGTTGGATTCTGAGGGTGGGGAGGGAGAG
 AGAGGGAGGGAGAGGGAGTGAAGAGCCTGCCCTCTATATGGATTCTCAGGGCCCTCCA
 CATCTGAGGTGGCTATTCCCATCACACACAGATTGCTCCTGGTGTTCATTTCAAGGCCAG
 TGTTTCAGCAGCAGCGTTTGGAAAGCAGGTTCTGTGGGACCCCGCCCGCCCGCCGAC
 TCCTTCATAGCAGCAGTAGTGGCTTCTCCATCCTGTTTTCTGCAACATTCTATACAAAAC
 TGTGCTGTGACCTTGGCGTAGGCTGGATCTGGCAAAGAGAATACAAATGAAACCCCTTC
 TTTCTCTTCCGTCACAACTCTGTAGAGCTCTCTGCACCTTACCCCTTCCACCTTT
 TGTATTTAATTTTAAAGTCAGTGTACTGCAAGGAAGCTGGATGCAAGATAGATACTATAT
 TAAACTGTACTGTTATTTAAGATGTAATAAAGCAGTTTGACATGAAAAAAAAAAAAAAAA
 AACTCGAC

5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_002074 unedited
ATACGACTCACTATAGGCGGCCGCGATTTCGGCACGAGGCCGCGACGAGGGCGCTGAGACA
AATTTACATGTATTGGAGACCAGACCAGAAGCCCTTCTGAATTAAGATCTCACATTCTTG
AAGGTGGCATTGAAGAGCACTAAGATCGGAAGATGAGTGAGCTTGACCAGTTACGGCAGG
AGGCCGAGCAACTTAAGAACCAGATTCGAGACGCCAGGAAAGCATGTGCAGATGCAACTC
TCTCTCAGATCACAAACAACATCGACCCAGTGGGAAGAATCCAAATGCGCACGAGGAGGA
CACTGCGGGGGCACCTGGCCAAGATCTACGCCATGCACTGGGGCACAGACTCCAGGCTTC
TCGTCACTGCCTCGCAGGATGGTAAACTTATCATCTGGGACAGCTACACCACCAACAAGG
TCCACGCCATCCCTCTGCGCTCCTCTGGGTGTCATGACCTGTGCATATGCCCTTCTGGGA
ACTATGTGGCCTGCGGTGGCCTGNATAACATTTGCTCCATTTACAATCTGAAAACCTGTG
AGGGGAACGTGCGCGTGAGTCGTGAGCTGGCAGGACACACAGGTTACCTGTCTGCTGCC
GATTCCTGGNATGACATCAGATCGTCACCAGCTCTGGAGACACCAGTGTGCCCTGTGGG
ACATCGAGACCGCCAGCAGACGACCACGTTTACCGGACACACTGGAGATGTCATGAGCC
TTTCTCTTGCTCCTGACACCAGACTGTTCTGCTCTGGTGTGTGATGCTTACCCAAAC
TCTGGGATGTGCGAAAAGGCATGTGCCGNCAAACCCCTTACTGGCCACGAGTCTGACATC
AATGCCATTTGCTCCTTTTCAATGGGCATGCATTTGCCACTGGCTAAAACAACGCACCTG
CAGCTGTTTGACCTTGTGCTGACCAGAACCATGACTACTC
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3' Read Nucleotide Sequence:

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>OriGene 3' read for NM_002074 unedited
GGGTTTGACTCTGNNACCGCGCCGCATNCTANGATCGAGTTTTTTTTTTTTTTTTTTTCA
TGTCAAACTGCTTTATTACATCTTAAATAACAGTACAGTTTAATATAGTATCTATCTTGC
ATCCAGCTTCCTTGACGTACACTGACTTTAAAATTAATACAAAAGGTGGAAAGGGGTAA
GGGTGCAGAGAGCTCTACAGAGTTGTTGGACGGAAAGAGAAAGAAGGGTTTCATTTGTA
TTCTCTTTGCCAGATCCAGGCCTACCGCAAGGTACAGCACAGTTTTGTATAGAATGTTG
CAGAAAACAGGATGGAGAAGCCACTACTGCTGCTATGAAGGAGTGCGGGGGGCGGGGCGG
GGGGTCCCACAGAACCTGCTTTCCAAACGCTGCTGCTGAACACTGGCCTTGAAATGAACA
CCAGGACAATCTGTGTGTGATGGGAATGAGCCACCTCAGATGTGGAGGGCCCTGAAAATC
CATATAGGAGGGCAGGCTCTTCACTCCCTTCTCCTCCCTCTCTCCCTCCCCACCCTCA
AATTC AACAGGAGTCGTTTGAACAGAACTTTTTTTTTTTTTTAAAGGAATCAAAAAACCA
GGACTTATTCGGTACCCAAGCGTGTAAAGCCCCGCCCTGACTTGTTCATTTGTCC
CAAAACAGTAACGAGAAGGGACCGAACCCCAATGGTTCCACTGTAAGAGTTTTTTTTTAA
AGGAAAAAAACCCCTAGGACTGAGCCCCATTGCCCTTTGACCTTTCTCAGCAGGCCATTTT
AAAAAAAACCCCATTTGTGCAACATCAAATTTAAATTACCTTAAAACCTTCGAACTTT
TTCTCAAATTGATTGGCATTGGTAAACCCAAAAAG
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Restriction Sites:

NotI-NotI

ACCN:

NM_002074

Insert Size:

3000 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>
Components:	<p>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).</p>
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_002074.2 , NP_002065.1
RefSeq Size:	3147 bp
RefSeq ORF:	1023 bp
Locus ID:	2782
UniProt ID:	P62873
Cytogenetics:	1p36.33
Domains:	WD40
Protein Pathways:	Chemokine signaling pathway, Taste transduction
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. Beta subunits are important regulators of alpha subunits, as well as of certain signal transduction receptors and effectors. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2013]</p> <p>Transcript Variant: This variant (1) represents the longest transcript and encodes the longer isoform (1). Both variants 1 and 2 encode the same isoform.</p>