

Product datasheet for **RC204178**

GNB2 (NM_005273) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GNB2 (NM_005273) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GNB2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC204178 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGTGAGCTGGAGCAACTGAGACAGGAGGCCGAGCAGCTCCGGAACCAGATCCGGGATGCCCGAAAAG
CATGTGGGGACTCAACTGACCCAGATCACAGCTGGGCTGGACCCAGTGGGGAGAATCCAGATGAGGAC
CCGGAGGACCCTCCGTGGGCACCTGGCAAAGATCTATGCCATGCACTGGGGACCAGCTCAAGGCTGCTG
GTCAGCGCCTCCAGGATGGGAAGCTCATCATCTGGGACAGCTACACCACCAACAAGTCCACGCCATCC
CGCTGCCTCCTCTGGTAATGACCTGTGCCTACGCGCCCTCAGGGAACCTTTGTGGCCTGTGGGGGTT
GGACAACATCTGCTCCATCTACAGCCTCAAGACCCGCGAGGGCAACGTCAGGGTACGCGGGAGCTGCCT
GGCCACACTGGGTACCTGTCGTGTTGCCGCTTCTGGATGACAACCAAATCATCACCAGCTCTGGGGATA
CCACCTGTGCCCTGTGGGACATTGAGACAGGCCAGCAGACAGTGGGTTTTGCTGGACACAGTGGGGATGT
GATGTCCCTGTCCCTGGCCCCGATGGCCGCACGTTTGTGTCAGGCGCCTGTGATGCCTCTATCAAGCTG
TGGGACGTGCGGGATTCCATGTGCCGACAGACCTTCATCGGCCATGAATCCGACATCAATGCAGTGGCTT
TCTTCCCCAACGGCTACGCCTTACCACCGCTCTGACGACGCCAGTCCGCTCTTCGACCTGCGGGC
CGATCAGGAGCTCCTCATGTACTCCATGACAACATCATCTGTGGCATCACCTCTGTTGCCCTCTCGCGC
AGCGGACGGCTGCTGCTCGCTGGCTACGACGACTTCAACTGCAACATCTGGGATGCCATGAAGGGCGACC
GTGCAGGAGTCCCTCGCTGGCCACGACAACCGCGTGAGCTGCCTTGGGGTACCGACGATGGCATGGCTGT
GGCCACGGGCTCCTGGACTCCTTCTCAAGATCTGGAAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC204178 protein sequence
Red=Cloning site Green=Tags(s)

MSELEQLRQAEQLRNQIRDARKACGDSTLTQITAGLDPVGRIQMRTRRTLGRHLAKIYAMHWGTD S RLL
 VSASQDGKLI IWDSYTTNKVHAIPLRSSWVMTCA YAPSGNFVACGGLDNICSIYSLKTR EGNRVRSRELP
 GHTGYLSCCRFLDDNQIITSSGDTTCALWDIETGQQT VGFAGHSGDVM SLSLAPDGRTFVSGACDASIKL
 WDVRDSMCRQTFIGHESDINAVAFPPNGYAFTTGSDDATCRLFDLRADQELLMYSHDNIICGITSVAFSR
 SGRLLLAGYDDFNCNIWDAMKGD RAGVLAGHDNRV SCLGVTDDGMAVATGSWDSFLKIWN

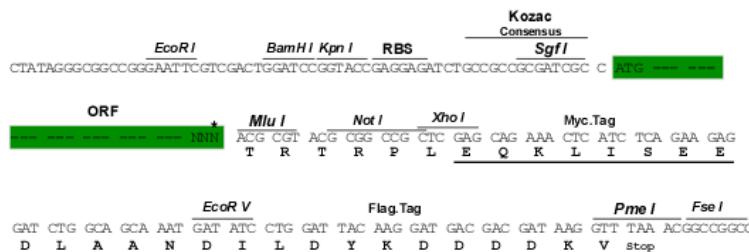
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6059_e06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_005273

ORF Size: 1020 bp

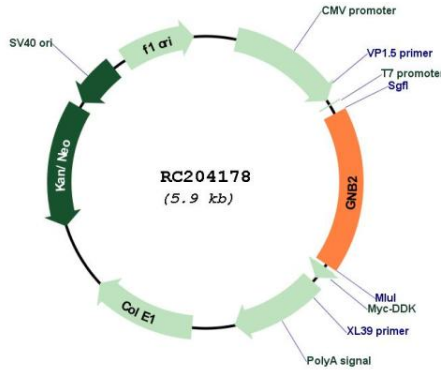
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

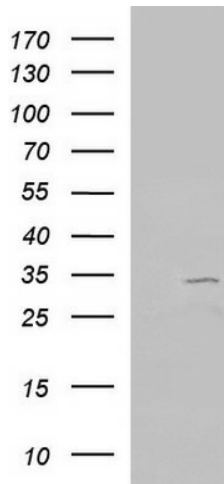
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_005273.4</u>
RefSeq Size:	1681 bp
RefSeq ORF:	1023 bp
Locus ID:	2783
UniProt ID:	<u>P62879</u>
Cytogenetics:	7q22.1
Domains:	WD40
Protein Pathways:	Chemokine signaling pathway
MW:	37.3 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. Beta subunits are important regulators of alpha subunits, as well as of certain signal transduction receptors and effectors. This gene contains a trinucleotide (CCG) repeat length polymorphism in its 5' UTR. [provided by RefSeq, Jul 2008]

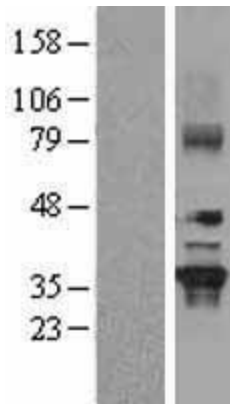
Product images:



Circular map for RC204178



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY GNB2 (Cat# RC204178, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GNB2 (Cat# [TA590202]). Positive lysates [LY401621] (100ug) and [LC401621] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401621]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204178 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).