

Product datasheet for **RC204134**

GNB5 (NM_006578) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GNB5 (NM_006578) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GNB5
Synonyms:	GB5; gbeta5; IDDCA; LADCI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC204134 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCAACCGAGGGGCTGCACGAGAACGAGACGCTGGCGTCGCTGAAGAGCGAGGCCGAGAGCCTCAAGG
GCAAGCTGGAGGAGGAGCGAGCCAAGCTGCACGATGTGGAGCTGCACCAGGTGGCGGAGCGGGTGGAGGC
CCTGGGGCAGTTTGTTCATGAAGACCAGAAGGACCCTCAAAGGCCACGGGAACAAAGTCTGTGCATGGAC
TGGTGCAAAGATAAGAGGAGGATCGTGAGCTCGTCACAGGATGGGAAGGTGATCGTGTGGGATTCCTTCA
CCACAAACAAGGAGCACGCGGTACCATGCCCTGCACGTGGGTGATGGCATGTGCTTATGCCCATCGGG
ATGTGCCATTGCTTGTGGTGGTTTGGATAATAAGTGTTCTGTGTACCCCTTGACGTTTGACAAAAATGAA
AACATGGCTGCCAAAAAGAAGTCTGTTGCTATGCACACCAACTACCTGTGGCCTGCAGCTTCAACCACT
CTGACATGCAGATCCTGACAGCGAGCGCGATGGCACATGTGCCCTGTGGGACGTGGAGAGCGGGCAGCT
GCTGCAGAGCTTCCACGGACATGGGGCTGACGTCTCTGCTTGGACCTGGCCCCCTCAGAAACTGGAAAC
ACCTTCGTGTCTGGGGATGTGACAAGAAAGCCATGGTGTGGGACATGCGCTCCGGCCAGTGCCTGCAGG
CCTTTGAAACACATGAATCTGACATCAACAGTGTCCGGTACTACCCAGTGGAGATGCCTTTGCTTCAGG
GTCAGATGACGCTACGTGTCCCTCTATGACCTGCGGGCAGATAGGGAGGTTGCCATCTATTCCAAGAA
AGCATCATATTTGGAGCATCCAGCGTGGACTTCCCTCAGTGGTCCCTGCTGTTTGTGGATACAATG
ATTACACTATCAACGCTCGGGATGTTCTCAAAGGGTCCCGGGTCTCCATCCTGTTTGGACATGAAAACCG
CGTTAGCACTCTACGAGTTTCCCCCGATGGGACTGCTTTCTGCTCTGGATCATGGGATCATACCCTCAGA
GCTGGGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC204134 protein sequence
Red=Cloning site Green=Tags(s)

MATEGLHENETLASLKSEAESLKGKLEERAKLHDVELHQVAERVEALGQFVMKTRRTLKGHGNKVL CMD
 WCKDKRRIVSSSQDGKVIWDSFTTNKEHAVTMPCTWVMACAYAPSGCAIACGGLDNKCSVYPLTFDKNE
 NMAAKKKSVMHTNYLSACSFTNSDMQIL TASGDGTALWDVESGQLLQSFHGHGADVLCCLDLAPSETGN
 TFVSGGCDKKAMVWDMRSGQCVQAFETHESDINSVRYYP SGDAFASGSDDATCRLYDLRADREVAIYSKE
 SIIFGASSVDFSLSGRLLFAGYNDYTIWVDVLKGSRVSILFGHENRVSTLRVSPDGTAFCSGSDWHTLR
 VWA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6432_f09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_006578

ORF Size: 1059 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_006578.4](#)

RefSeq Size: 2979 bp

RefSeq ORF: 1062 bp

Locus ID: 10681

UniProt ID: [O14775](#)

Cytogenetics: 15q21.2

Domains: WD40

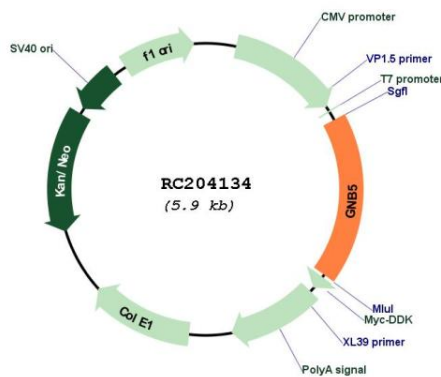
Protein Families: Druggable Genome

Protein Pathways: Chemokine signaling pathway

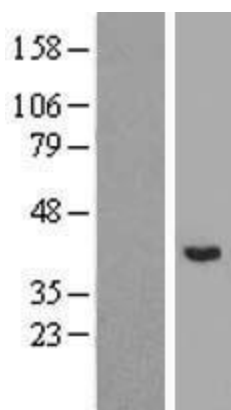
MW: 38.8 kDa

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. Alternatively spliced transcript variants encoding different isoforms exist. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC204134



Western blot validation of overexpression lysate (Cat# [LY416553]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204134 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).