

Product datasheet for MR206192

Gnb5 (NM_010313) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gnb5 (NM_010313) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gnb5
Synonyms:	flr; Gbeta5; GBS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR206192 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGTGCGATCAGACCTTCCTGGTAAATGTGTTCCGGCTCATGTGACAAATGCTTCAAACAAAGGGCCCTAA
GACCCGTTTTCAAGAAATCTCAACAACCTCACTACTGCTCCACGTGTGCAGAGATCATGGCAACCGATGG
GCTGCACGAGAACGAGACGCTGGCGTCGCTGAAGAGCGAGGCCGAGAGCCTCAAGGGCAAGCTAGAGGAG
GAGCGGGCAAAGCTGCATGACGTGGAGCTACACCAGGTGGCCGAGCGGGTGGAGGCCCTGGGCCAGTTTG
TCATGAAGACCAGAAGGACCCCTCAAAGGCCACGGGAACAAAGTCTGTGCATGGATTGGTGCAAAGACAA
GCGGAGAATCGTGAGCTCCTCACAGGATGGGAAGGTGATTGTCTGGGATTCCTTCACTACGAACAAGGAG
CACGCGGTACCATGCCTTGACCTGGGTGATGGCGTGTGCTTACGCGCCATCGGGATGCGCCATTGCTT
GTGGTGGTCTGGATAATAAGTGCTCTGTGTATCCACTGACATTCGACAAGAACGAGAACATGGCCGCCAA
GAAGAAGTCTGTTGCTATGCACACCAACTACCTGTCTGCCTGCAGCTTACCAACTCTGACATGCAGATT
CTGACAGCCAGCGGGATGGCACCTGCGCCCTGTGGGATGTGAAAGTGGACAGCTGTTACAGAGCTTCC
ATGGGCACGGGGCTGACGTCCTCTGCTTGGACCTGGCCCCCTCGGAAACAGGAAACACCTTCGTGTCTGG
GGGTTGTGACAAGAAGGCCATGGTGTGGGACATGCGCTCTGGCCAGTGCCTGCAAGCCTTTGAAACTCAT
GAATCGGATGTCAACAGTGTTCGGTACTACCCAGTGGGGATGCTTTTGGCTTCGGGGTGGATGATGCCA
CGTGTGCGCTCTATGACCTGAGGGCAGATAGAGAGGTGCGCATCTACTCAAGGAGAGCATATTTGG
CGCCTCGAGTGTGGACTTCTCCCTCAGTGGTTCGCTGCTTTTTGCTGGGTACAATGACTATACCATCAAT
GTCTGGGATGTTCTCAAGGGCTCCCGGTCTCCATCCTGTTTGGACATGAAAACCGCGTCAGCACTCTGC
GAGTGTCTCCTGATGGGACAGCATTCTGCTCGGGATCATGGGATCACACCCTAAGAGTTTGGGCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR206192 protein sequence
Red=Cloning site Green=Tags(s)

MCDQTFLLVNVFGSCDKCFKQRALRPVFKKSQQLNYCSTCAEIMATDGLHENETLASLKSEAESLKGKLEE
 ERAKLHDVELHQVAERVEALGQFVMKTRRTLKGHGKVLKMDWCKDKRRIVSSSQDGKVIWDSFTTNKE
 HAVTMPCTWVMACAYAPSGCAIACGGLDNKCSVYPLTFDKNENMAAKKKSAMHTNYLSACSFTNSDMQI
 LTASGDGTCALWDVESGQLLQSFHGHGADVLCCLDLAPSETGNTFVSGGCDKKAMVWDMRSGQCQVAFETH
 ESDVNSVRYYPGDAFASGSDDATCRLYDLRADREVAIYSKESIIFGASSVDFSLSGRLLFAGYNDYTIIN
 VWDVLKGSRVSILFGHENRVSTLRVSPDGTAFCSGSWDHTLRVWA

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_010313

ORF Size: 1188 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_010313.2](#)

RefSeq Size: 2249 bp

RefSeq ORF: 1188 bp

Locus ID: 14697

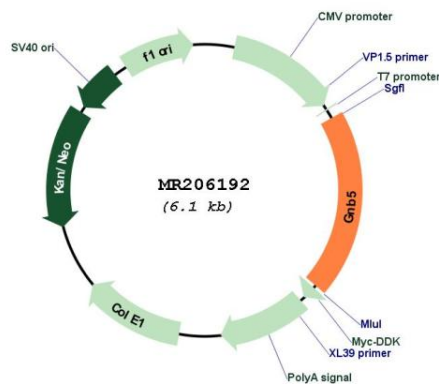
UniProt ID: [P62881](#)

Cytogenetics: 9 42.3 cM

MW: 43.6 kDa

Gene Summary: Enhances GTPase-activating protein (GAP) activity of regulator of G protein signaling (RGS) proteins, hence involved in the termination of the signaling initiated by the G protein coupled receptors (GPCRs) by accelerating the GTP hydrolysis on the G-alpha subunits, thereby promoting their inactivation (Probable). Increases RGS9 GTPase-activating protein (GAP) activity, hence contributes to the deactivation of G protein signaling initiated by D(2) dopamine receptors (By similarity). May play an important role in neuronal signaling, including in the parasympathetic, but not sympathetic, control of heart rate (By similarity). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR206192