

Product datasheet for **MR225835**

Gnas (NM_201617) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gnas (NM_201617) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gnas
Synonyms:	5530400H20Rik; A930027G11Rik; C130027O20Rik; G; Ga; Galphas; Gn; Gnas1; Gnasxl; GPSA; Gs-; Gs-alpha; Gsa; GSP; N; Nes; Nesp; Nesp55; Nespl; Oed; Oed-Sml; Oedsml; P; P1; P2; P3; PHP1A; PHP1B; POH; SCG; SCG6; XL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>MR225835 representing NM_201617
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGGCATGTTCAACTGCCTCCACGGCAATAATATGTGACGACAACACGATATCCCCCTGAAGTCGGG
AGCAGCCCGAGCAAGAACCTTTGGAAGCCAGGGCAGCTGCCCCGGTCTGGGGCTGGCCAGCCGA
AGAAATGGCGACCGAACCGACTCCGAACCGTCTAACAATGAGCCCGTCCCCGACGAGACTGGCAGTGAG
ATCAGTGGACCCCAAGAAGACTCCTAAATCTGACATCCAAAGCCCTGCCAGGCCTTCGAGGAAGTCCGAG
TGGGTGGAGACTACAGCCACCTCCGGAGGAAGCCATGCCATTGAGACACAACAGCCAGCCTGGGAGA
TTTCTGGCCACCCTGGAGCAGCCAGGACCATCTGGGACCCATCAGGCCTCCAAGCCTTCAACCCAGCG
ATTTTGGAGCCCGGACCCCACTGGCGGAGCCAGGCCTGGGAGCCTATACCCCCACCAGAAGAAG
CTATGCCATTTGAGTTCAACGAGCCTGCCAGGGAGACCATAGCCAGCCTCCCTTGAAGTCCAGACCT
TGCGCCAGGAGGTCCGGAAGCATTGGTCCCAGAGCTTCCCAGGAGCCCGGGAACATCAGATTTGAA
AACGCTGGCTCCGAGAAGACTACAGCCCTCCCTGAAGAATCTGTGCCATTTAGGTCGGTGGAGAAG
AATTCGGGGCGATAGCCACCCCAAGGACTCCCGCGAGTCAATCCACAATCGGCATTGGCGGCGAGTT
CCCAGAGTCCGGTCCCGAGTCCGCTCTGCCTCGCTCCCGCGAGAACGCGCTCCCTCTGGTCCGA
GGCGCCATTGACAGACATTCCGCGAGGCTGTCAGATCTCCTCTAACTTCGCATGCGACAGCCCCCGA
TGGAGATCACCAGACCCCTGCTTGGATTGGCAGAGCCTCATTGGGGTCGACGACGACACCCGCTGTCAA
TATGGACAGCCCCCAATCGCAAGTGTGGCCGCCATCGAAGTCTCGGGAGCCCAAGATAAGAGCGAG
TGCGCAGAGAGACCCCAAGTTGAGCGAGAAGCAGCCGAGATGGAAGGAAGCCCTACCACCCCACTGCGG
TGAAGAAAAGTCCCTCTCCGAGAGAGGGGACGGATCTTCCACCCAGCCTGAAGCAATGGATGCCAA
GCCAGCCCTGCTGCCAAGCCGTCTACCGGATCTGATGCTGGAGCTCCTACGGATTCCGCGATGCTC
ACAGATAGCCAGAGCGATGCCGGAAGACGGGACAGCCCAAGAACGCCTTCAGATCTCCAGTCCGATC
CTGAAGAATCGAAGAAGCCCAAGTGTCCGCGCGATCTGACGGAGGGGACAGCCCAAGTCCGCCCAGC
CACTCTGCCGAGTCCGAGTCTGAAGGCAGCAGAGATCCAGCCGCGAGCCAGCCTCCGAGGCGAGTCCCT
GCCACCACGGCCGAGTCTGCCTCCGGGGCAGCCCTGTCACCCAGGTGGAGCCCGAGCCGCGGAGTCT
CTGCCACCCTGGCGAGCCTGCCGCCGGGACAGCCCTATCACCCCAAGGAGCCCACTACCCGGGAGT
CCCCTCTGCTAGAGCCCATCCGGCCGCTGGAGCAGTCCCTGGCGCCCAAGCAATGTCAGCCTCTGCTAGG
GCAGTCCGCTAGGGCAGCCTATGCAGGTCCACTGGTCTGGGGAGCCAGGTCACTCTCAGCTACTCCCG
CCGCTCCGGGATCCCTTCTGCCCGCGCAGCAGCTGCCGCCGGGAGCCTCTGCTGCCCGCGAGTCCG
TGCTGGCCGCTCAGCCTCTGCCGCCCCAGCAGGGCCATCTTAGACCCCAAGCCCGAGATCCAGGTT
GCTGACCCGCTACTCCGCGCCCTCTCCGCGCCGACTGCCTGGCTGACAAGTACGAGCGGGGCGAA
GCTGCTGACAGTACGAGGCATCGTCTGGCATCTGCGAGATCGAGTCTCCAGTGTAGTTCGGAAGAAGG
GGCCACCGGCTGCTTCCAGTGGCTTCTGCGGCAAAACCGCCCTGGCTGCCCGGAGCCACACGGTC
GGGAGCAACCCAGTCCGCAACTTCTCACCCGAGCCTTCGGAAGTGTCTCGGTCTATCCGAGTGTACCC
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AGCCATTGAGATGCGAGAGCAGAAGCGCGCAGATAAGAAACGCAAGCAAGTCAATCGACAAGCAACTGGAG
GAGGAGAAGATGGACTACATGTGTACACCCGCTGCTGCTTCTAGGGAGAAAAGTGGTCCGAGCGACA
CTGAGGTCGTTACCGGCGGAGGCCAGCGCCAGCGATCGTAGGCTGGACAGCCGGGGGCGTGA
GGTGGAGCCAGAACTGCTGGGTGGGCCCTTCGGGCTCCCGGCTCGATTGTTCTGACCGCGGTGGG
CTAGGGCCATCCGGGTGCGCGCCCGCCTCGCTGGCAGGCTGCTTCGACTCAGACAGCTTGTGTGTTG
GTGTGTGTTGGTCCATTTTCTGTGTTGCGCTGTGCA

ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR225835 representing NM_201617
 Red=Cloning site Green=Tags(s)

MGMFNCLHGNMMSGQHDIPPEVGEQPEQEPLEAPGAAAPGAGAGPAEEMATEPDSEPSNNEPVPDETGSE
 ISGPPEDSKSDIQSPCQAFEEVVRVGGDYSPPEEAMPFETQQPSLGDFWPTLEQPGPSGTPSLQAFNPA
 ILEPGTPTGASPLGAYTPPPEEAMPFEFNEPAQGDHSQPPLQVPDLAPGGPEALVPRALPAEPGNIRFE
 NAGFREDYSPPEESVVPFQVGGEEFGDSSPPGLPRVIPQIGIGGEFPTVAVPSALCLAPAEAPPPLWVR
 GAIDRPFREAVRSPNFACDSSPMEITRPLLEIGRASIGVDDDTAVNMDSPPIASDGPPIEVSGAPDKSE
 CAERPPVEREAAEMEGSPTTATAVEGKVPSPERGDGSSTQPEAMDAPAAQAVSTGSDAGAPTSAML
 TDSQSDAGEDGTAPGTPSDLQSDPEELEEAAPVRADPDGGAAPVAPATPAESESESGSRDPAAPASEAVP
 ATTAESASGAAPVTQVEPAAAAVSATLAEPAAARAAPITPKPTTRAVPSARAHPAAGAVPGAPAMSASAR
 AAAARAAYAGPLVWGARSLSATPAARASLPARAAAAARAASAARAVAAGRSASAAPSRAHLRPPSPEIQV
 ADPPTPRPPRPRTAWPKYERGRSCCRYEASSGICEIESSDSEEGATGCFQWLLRRRRRPLRSHTV
 GSNPVRNFFTRAFGSCFGLSECTRSRSLSPGKAKDPMEEERRKQMRKEAIEMREQRADKKRSLIDKQLE
 EEKMDYMCThRLLLLGRKVVPSTDEGRYRPEASASADRRLDRRGREVSPELLGWALRGSPGSIVDRRG
 LGPSGCAPPPRLARLLRLQLVGVWCWCPFSVFACA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

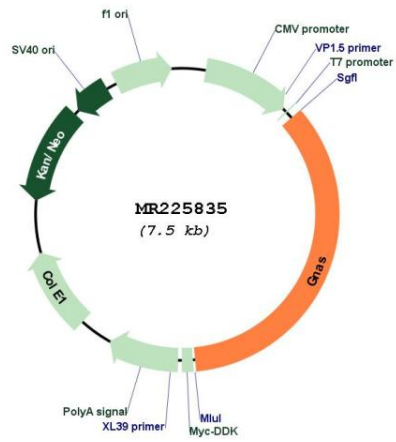


ACCN: NM_201617

ORF Size: 2628 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.
RefSeq:	NM_201617.2 , NP_963911.1
RefSeq Size:	2731 bp
RefSeq ORF:	2631 bp
Locus ID:	14683
UniProt ID:	Q6R0H7
Cytogenetics:	2 97.89 cM
MW:	91.5 kDa
Gene Summary:	This locus has a highly complex imprinted expression pattern. It gives rise to maternally, paternally, and biallelically expressed transcripts that are derived from four alternative promoters and 5' exons. Some transcripts contain a differentially methylated region (DMR) at their 5' exons, which is commonly found in imprinted genes and correlates with transcript expression. This gene has an antisense transcript. One of the transcripts produced from this locus, and the antisense transcript, are both paternally expressed noncoding RNAs, and may regulate imprinting in this region. In addition, one of the transcripts contains a second overlapping ORF, which encodes a structurally unrelated protein - Alex. Alternative splicing of downstream exons is also observed, which results in different forms of the stimulatory G-protein alpha subunit, a key element of the classical signal transduction pathway linking receptor-ligand interactions with the activation of adenylyl cyclase and a variety of cellular responses. Additional transcript variants have been found for this gene, but the full-length nature and/or biological validity of some variants have not been determined. [provided by RefSeq, Jun 2015]

Product images:



Circular map for MR225835