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Product datasheet for MR228805

Gnas (NM_019690) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gnas (NM_019690) 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
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

ORF Nucleotide Sequence:

>MR228805 representing NM_019690
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGATCGCAGGTCCCGGGCTCAGCAGTGGCGCCGAGCTCGCCATAATTACAACGACCTGTGCCCGCCCA
TAGGCCGCCGGGCTGCCACCGCTCTCCTCTGGCTCTCCTGCTCCATTGCTCTCCTCCGCGCCCTAGCCTC
TTCCAACGCCCGCGCCCAGCAGCGTGCTGCCCAGCGCCGGAGCTTCCTTAACGCCCACCACCGCTCCGCT
GCCGCTGCAGCTGCCGCACAGGTACTCCCTGAGTCCTCTGAATCTGAGTCTGATCACGAGCACGAGGAGG
TTGAGCCTGAGCTGGCCCGCCCCGAGTGCCTAGAGTACGATCAGGACGACTACGAGACCGAGACCGATTC
TGAGACCGAGCCTGAGTCCGATATCGAATCCGAGACCGAAATCGAGACCGAGCCAGAGACCGAGCCAGAA
ACCGAGCCAGAGACCGAGCCAGAGGACGAGCGCGGCCCCCGGGGTGCCACCTTCAACCAGTCACTCACTC
AGCGTCTGCACGCTCTGAAGTTGCAGAGCGCCGACGCCTCCCCGAGACGTGCGCAGCCCACCACTCAGGA
GCCTGAGAGCGCAAGCGAGGGGGAGGAGCCCCAGCGAGGGCCCTTAGATCAGGATCCTCGGGACCCCGAG
GAGGAGCCAGAGGAGCGCAAGGAGGAAAACAGGCAGCCCCGCCGCTGCAAGACCAGGAGGCCAGCCCGCC
GTCGCGACCAGTCCCCGGAGTCCCCTCCCAGAAAGGGGCCCATCCCCATCCGGCGTCAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

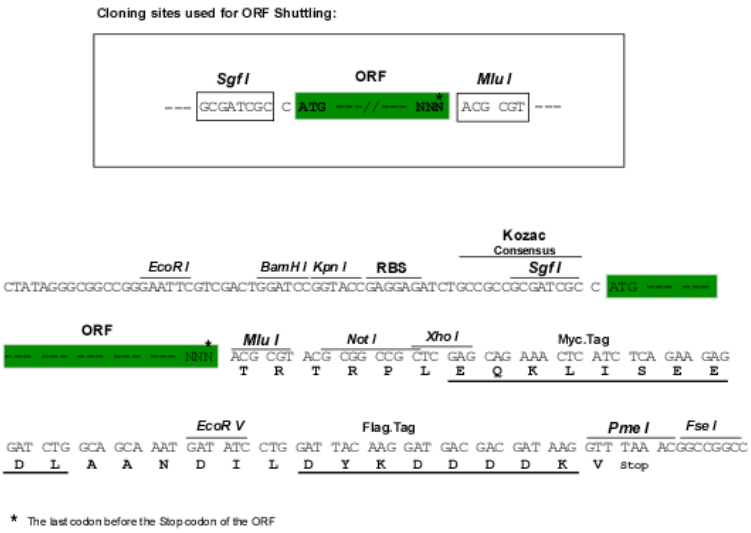
>MR228805 representing NM_019690
Red=Cloning site Green=Tags(s)

MDRRSRAQQWRRARHNYNDLCPPIGRRAATALLWLSCSIALLRALASSNARAQQRAAQRRSFLNAHHRSA
AAAAAAQVLPESSESESDHEHEEVEPELARPECLEYDQDDYETETDSETEPESDIESETEIETEPETEPE
TEPETEPEDERGPRGATFNQSLTQRLHALKLQSADASPRRAQPTTQEPESASEGEEPQRGPLDQDPRDPE
EEPEERKEENRQPRRCKTRRPARRRDQSPESPPRKGPIPIRRH

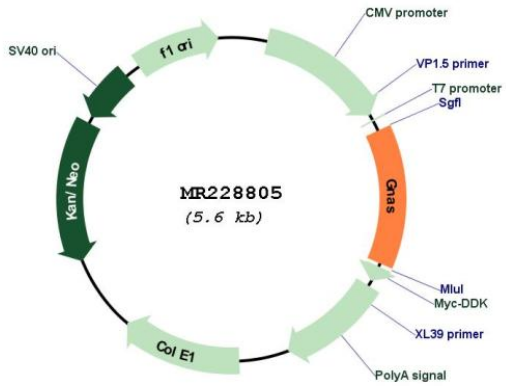
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_019690

ORF Size: 759 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_019690.3, NP_062664.2
RefSeq Size:	1646 bp
RefSeq ORF:	762 bp
Locus ID:	14683
UniProt ID:	Q9Z0F1
Cytogenetics:	2 97.89 cM
MW:	29.4 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 reponses. 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]