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Product datasheet for RR200465

Gnas (NM_019132) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gnas (NM_019132) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gnas
Synonyms:	ALEX; G-alpha-8; Gnas1; Gnpas; Nesp55; SCG6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RR200465 representing NM_019132
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGCTGCCTCGGCAACAGTAAGACCGAGGACCAGCGCAACGAGGAGAAGGCGCAGCGCGAGGCCAACA
AAAAGATCGAGAAGCAGCTGCAGAAGGACAAGCAGGTCTACCGGGCCACGCACCGCCTGCTGCTGCTGGG
TGCTGGAGAGTCTGGCAAAAGCACCATTGTGAAGCAGATGAGGATCCTACATGTTAATGGGTTTAACGGA
GAGGGCGGCGAAGAGGACCCGCAGGCTGCAAGGAGCAACAGCGATGGTGAGAAGGCCACCAAAGTGCAGG
ACATCAAAAACAACCTGAAGGAGGCCATTGAAACCATTGTGGCCGCCATGAGCAACCTGGTGCCCCCCGT
GGAGCTGGCCAACCCTGAGAACCAGTTCAGAGTGGACTACATTCTGAGCGTGATGAACGTGCCAAACTTT
GACTTCCCACCTGAATTCTATGAGCATGCCAAGGCTCTGTGGGAGGATGAGGGAGTTCGTGCCTGCTACG
AGCGCTCCAACGAGTACCAGCTGATCGACTGTGCCCAGTACTTCCTGGACAAGATTGATGTGATCAAGCA
GGCCGACTACGTGCCAAGTGACCAGGACCTGCTTCGCTGCCGCGTCCTGACCTCTGGAATCTTTGAGACC
AAGTTCCAGGTGGACAAAGTCAACTTCCACATGTTCGATGTGGGCGGCCAGCGCGATGAACGCCGCAAGT
GGATCCAGTGCTTCAATGATGTGACTGCCATCATCTTCGTGGTGGCCAGCAGCAGCTACAACATGGTCAT
CCGGGAGGACAACCAGACCAACCGTCTGCAGGAGGCTCTGAACCTCTTCAAGAGCATCTGGAACAACAGA
TGGCTGCGTACCATCTCTGTGATCCTCTTCCTCAACAAGCAAGATCTGCTTGCTGAGAAGGTCCTCGCTG
GGAAATCGAAGATTGAGGACTACTTTCCAGAGTTCGCTCGCTACACCACTCCTGAGGATGCGACTCCCGA
GCCCGGAGAGGACCCACGCGTGACCCGGGCCAAGTACTTCATCCGGGATGAGTTTCTGAGAATCAGCACT
GCTAGTGGAGATGGACGTCACTACTGCTACCCTCACTTTACCTGCGCCGTGGACACTGAGAACATCCGCC
GTGTCTTCAACGACTGCCGTGACATCATCCAGCGCATGCATCTTCGCCAATACGAGCTGCTC

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

View online »

Protein Sequence:

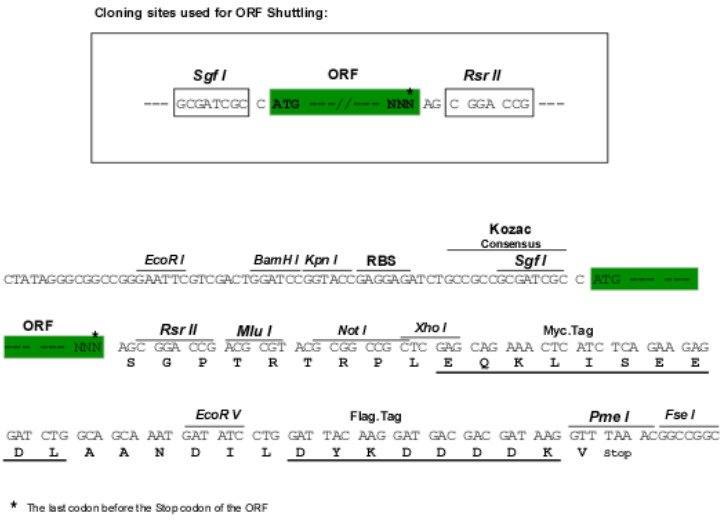
>RR200465 representing NM_019132
Red=Cloning site Green=Tags(s)

MGCLGNSKTEDQRNEEKAQREANKKIEKQLQKDKQVYRATHRLLLLGAGESGKSTIVKQMRILHVNGFNG
EGGEEDPQAARSNSDGEKATKVQDIKNNLKEAIETIVAAMSNLVPPVELANPENQFRVDYILSVMNVPNF
DFPPEFYEHAKALWEDEGVRACYERSNEYQLIDCAQYFLDKIDVIKQADYVPSDQDLLRCRVLTSGIFET
KFQVDKVNFHMFDVGGQRDERRKWIQCFNDVTAIIFVVASSSYNMVIREDNQTNRLQEALNLFKSIWNNR
WLRTISVILFLNKQDLLAEKVLAGKSKIEDYFPEFARYTTPEDATPEPGEDPRVTRAKYFIRDEFLRIST
ASGDGRHYCYPHFTCAVDTENIRRVFNDCRDIIQRMHLRQYELL

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_019132

ORF Size: 1182 bp

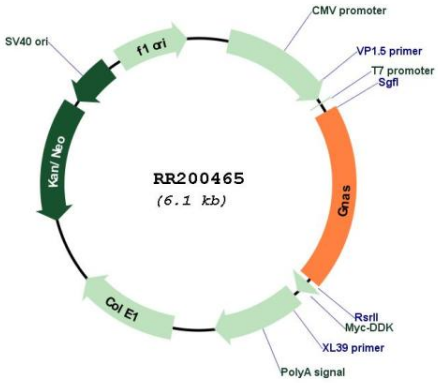
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_019132.2
RefSeq Size:	1738 bp
RefSeq ORF:	1185 bp
Locus ID:	24896
UniProt ID:	P63095
Cytogenetics:	3q43
MW:	45.7 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, and this DMR is commonly found in imprinted genes and correlates with transcript expression. 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. Multiple transcript variants have been found for this gene. [provided by RefSeq, Apr 2009]

Product images:



Circular map for RR200465