

Product datasheet for **MC222309**

Gnas (NM_201617) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gnas (NM_201617) Mouse Untagged Clone
Tag:	Tag Free
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)



[View online »](#)

Fully Sequenced ORF: >MC222309 representing NM_201617
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGCATGTTCAACTGCCTCCACGGCAATAATATGTGAGACAACACGATATCCCCCTGAAGTCGGGG
 AGCAGCCCGAGCAAGAACCTTTGGAAGCCAGGGGAGCTGCCCGGCTGGGGCTGGCCAGCCGA
 AGAAATGGCGACCGAACCGACTCCGAACCGTCTAACAATGAGCCCGTCCCCGACGAGACTGGCAGTGAG
 ATCAGTGGACCCCGAGAAGACTCCTAACTGACATCCAAAGCCCTGCCAGGCCTTCGAGGAAGTCCGAG
 TGGGTGGAGACTACAGCCACCTCCGGAGGAAGCCATGCCATTGAGACACAACAGCCAGCCTGGGAGA
 TTTCTGGCCACCCTGGAGCAGCCAGGACCATCTGGGACCCATCAGGCCTCCAAGCCTTCAACCCAGCG
 ATTTTGGAGCCCGGACCCCACTGGCGGAGCCAGGCCTGGGAGCCTATACCCCCACCAGAAGAAG
 CTATGCCATTTGAGTTCAACGAGCCTGCCAGGGAGACCATAGCCAGCCTCCCTTGAAGTCCAGACCT
 TGCGCCAGGAGGTCCGGAAGCATTGGTCCCAGAGCTTCCCAGGAGCCCGGGAACATCAGATTTGAA
 AACGCTGGCTCCGAGAAGACTACAGCCCTCCCTGAAGAATCTGTGCCATTTAGGTCGGTGGAGAAG
 AATTCCGGGGCGATAGCCACCCCAAGGACTCCCGCGAGTCATCCCAAAATCGGCATTGGCGGGGAGTT
 CCCGACAGTCGCGGTCCCGAGTGCCTCTGCCTCGCTCCCGCGAGAACGCGCTCCCTCTGGTCCGA
 GGCGCCATTGACAGACATTCCGCGAGGCTGTCAGATCTCCTCTAACTTCGCATGCGACAGCCCCCGA
 TGGAGATCACCAGACCCCTGCTTGAAGTGGCAGAGCCTCATTGGGGTCGACGACGACACCGCTGTCAA
 TATGGACAGCCCCCAATCGCAAGTGTGGCCGCCATCGAAGTCTCGGGAGCCCCAGATAAGAGCGAG
 TGCGCAGAGAGACCCCAAGTTGAGCGAGAAGCAGCCGAGATGGAAGGAAGCCCTACCACCGCCACTGCGG
 TGAAGGAAAAGTCCCTCTCCGAGAGAGGGGACGGATCTTCCACCCAGCCTGAAGCAATGGATGCCAA
 GCCAGCCCTGCTGCCAAGCCGTCTACCGGATCTGATGCTGGAGCTCCTACGGATTCCGCGATGCTC
 ACAGATAGCCAGAGCGATGCCGGAAGACGGGACAGCCCAAGAACGCCTTCAGATCTCCAGTCGGATC
 CTGAAGAACTCGAAGAAGCCCAAGTGTCCGCGCGATCCTGACGGAGGGGACAGCCCAAGTCCGCCCAGC
 CACTCCTGCCGAGTCCGAGTCTGAAGGCAGCAGAGATCCAGCCCGGAGCCAGCCTCCGAGGCGACTCCCT
 GCCACCACGGCCGAGTCTGCCTCCGGGGCAGCCCTGTCACCCAGGTGGAGCCCGAGCCGCGGAGTCT
 CTGCCACCCTGGCGGAGCCTGCCGCCGGGACAGCCCTATCACCCCAAGGAGCCCACTACCCGGGAGT
 CCCCTCTGCTAGAGCCCATCCGGCCGCTGGAGCAGTCCCTGGCGCCAGCAATGTCAGCCTCTGCTAGG
 GCAGTCCGCTAGGGCAGCCTATGCAGGTCCACTGGTCTGGGGAGCCAGGTCACTCTCAGTACTCCCG
 CGCTCCGGGATCCCTTCTGCCCGCGCAGCAGCTGCCGCCGGGAGCCCTCTGCTGCCCGCGAGTCCG
 TGCTGGCCGCTCAGCCTCTGCCGCCCCAGCAGGGCCATCTTAGACCCCCAGCCCGAGATCCAGGTT
 GCTGACCCGCTACTCCGCGCCCTCCTCCGCGCCGACTGCCTGGCTGACAAGTACGAGCGGGGCGAA
 GCTGCTGACAGTACGAGGCATCGTCTGGCATCTGCGAGATCGAGTCTCCAGTGTAGTTCGGAAGAAGG
 GGCCACCGGCTGCTTCCAGTGGCTTCTGCGGCGAAACCGCCCTGGCTGCCCGGAGCCACACGGTC
 GGGAGCAACCCAGTCCGCAACTTCTCACCCGAGCCTTCGGAAGTGTCTCGGTCTATCCGAGTGTACCC
 GATCACGATCCCTCAGCCCGGGAAGGCCAAGGATCCTATGGAGGAGAGGCGCAACAGATGCGCAAAGA
 AGCCATTGAGATGCGAGAGCAGAAGCGCGCAGATAAGAAACGCAAGCTCATCGACAAGCAACTGGAG
 GAGGAGAAGATGGACTACATGTGTACACACCGCCTGCTGCTTCTAGGGAGAAAAGTGGTCCGAGCGACA
 CTGAGGTCGTTACCGGCCGAGGCCAGCGCCAGCGATCGTAGGCTGGACAGCCGGGGGCGTGA
 GGTGAGCCAGAAGTGTGGGTGGGCCCTTCGGGGCTCCCGGCTCGATTGTTCTGTGACCGCGGTGGG
 CTAGGGCCATCCGGGTGCGCGCCCGCCTCGCTGGCACGGCTGCTTCGACTCAGACAGCTTGTGTGTTG
 GTGTGTGTTGGTGCATTTTCTGTGTTGCGCTGTGCA**TGA**

ACGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_201617
Insert Size: 2631 bp

OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	2734 bp
RefSeq ORF:	2631 bp
Locus ID:	14683
UniProt ID:	Q6R0H7
Cytogenetics:	2 97.89 cM

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]

Transcript Variant: This variant (6) is paternally expressed. Its 5' exon overlaps with variant 1 and none of its sequence overlaps with variant 7. This variant encodes isoform XXLb1, which has a distinct and shorter C-terminus, compared to isoform XLas. This variant is based on data in PMID:15148396. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.