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Product datasheet for MC223611

Gnas (NM_001077507) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gnas (NM_001077507) 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
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC223611 representing NM_001077507 Red=Cloning site Blue=ORF Orange=Stop codon TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGGCATGTTCAACTGCCTCCACGGCAATAATATGTCAGGACAACACGATATCCCCCCTGAAGTCGGGG AGCAGCCCGAGCAAGAACCTTTGGAAGCCCCAGGGGCAGCTGCCCCCGGTGCTGGGGCTGGCCCAGCCGA AGAAATGGCGACCGAACCGGACTCCGAACCGTCTAACAATGAGCCCGTCCCCGACGAGACTGGCAGTGAG ATCAGTGGACCCCCAGAAGACTCCAAATCTGACATCCAAAGCCCCTGCCAGGCCTTCGAGGAAGTCCGAG TGGGTGGAGACTACAGCCCACCTCCGGAGGAAGCCATGCCATTCGAGACACAACAGCCCAGCCTGGGAGA TTTCTGGCCCACCCTGGAGCAGCCAGGACCATCTGGGACCCCATCAGGCCTCCAAGCCTTCAACCCAGCG ATTTTGGAGCCCGGGACCCCCACTGGCGCGAGCCCAGGCCTGGGAGCCTATACCCCCCCACCAGAAGAAG CTATGCCATTTGAGTTCAACGAGCCTGCCCAGGGAGACCATAGCCAGCCTCCCTTGCAAGTCCCAGACCT TGCGCCAGGAGGTCCGGAAGCATTGGTCCCCAGAGCTCTTCCCGCGGAGCCCGGGAACATCAGATTTGAA AACGCTGGCTTCCGAGAAGACTACAGCCCTCCCCCTGAAGAATCTGTGCCATTTCAGGTCGGTGGAGAAG AATTCGGGGGCGATAGCCCACCCCCAGGACTCCCGCGAGTCATCCCACAAATCGGCATTGGCGGCGAGTT CCCGACAGTCGCGGTCCCGAGTGCGCTCTGCCTCGCTCCCGCCGAGAACGCGCCTCCCCTCTGGGTCCGA GGCGCCATTGACAGACCATTCCGCGAGGCTGTCAGATCTCCTCCTAACTTCGCATGCGACAGCCCCCCGA TGGAGATCACCAGACCCCTGCTTGAGATTGGCAGAGCCTCCATTGGGGTCGACGACGACACCGCTGTCAA TATGGACAGCCCCCCAATCGCAAGTGATGGCCCGCCCATCGAAGTCTCGGGAGCCCCAGATAAGAGCGAG TGCGCAGAGAGACCCCCAGTTGAGCGAGAAGCAGCCGAGATGGAAGGAAGCCCTACCACCGCCACTGCGG TGGAAGGAAAAGTCCCCTCTCCGGAGAGAGGGGACGGATCTTCCACCCAGCCTGAAGCAATGGATGCCAA GCCAGCCCCTGCTGCCCAAGCCGTCTCTACCGGATCTGATGCTGGAGCTCCTACGGATTCCGCGATGCTC ACAGATAGCCAGAGCGATGCCGGAGAAGACGGGACAGCCCCAGGAACGCCTTCAGATCTCCAGTCGGATC CTGAAGAACTCGAAGAAGCCCCAGCTGTCCGCGCCGATCCTGACGGAGGGGCAGCCCCAGTCGCCCCAGC

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CACTCCTGCCGAGTCCGAGTCTGAAGGCAGCAGAGATCCAGCCGCCGAGCCAGCCTCCGAGGCAGTCCCT
GCCACCACGGCCGAGTCTGCCTCCGGGGCAGCCCCTGTCACCCAGGTGGAGCCCGCAGCCGCGGCAGTCT
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CGCTGGCAAATCGAAGATTGAGGACTACTTTCCAGAGTTCGCTCGCTACACCACTCCTGAGGATGCGACT
CCCGAGCCGGGAGAGGACCCACGCGTGACCCGGGCCAAGTACTTCATTCGGGATGAGTTTCTGAGAATCA
GCACTGCTAGTGGAGATGGGCGCCACTACTGCTACCCTCACTTTACCTGCGCCGTGGACACTGAGAACAT
CCGCCGTGTCTTCAACGACTGCCGTGACATCATCCAGCGCATGCATCTCCGCCAATACGAGCTGCTCTAA

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-RsrII

ACCN: NM_001077507

Insert Size: 3360 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:	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_001077507.2, NP_001070975.1
RefSeq Size:	3737 bp
RefSeq ORF:	3360 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 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] Transcript Variant: This variant (5, also known as GNASXL) is paternally expressed. It has an alternate 5' exon, lacks an internal exon and uses an alternate splice site in the coding region, compared to variant 7. It encodes isoform f (also known as XLas), which has a longer and distinct N-terminus and lacks an internal segment, compared to isoform GNASL. Isoform f is the neuroendocrine-specific G-protein alpha subunit. 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.