

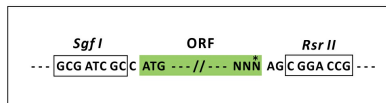
Product datasheet for MR225828L3

Gnas (NM_001077507) Mouse Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gnas (NM_001077507) Mouse Tagged Lenti ORF Clone
Tag:	Myc-DDK
Symbol:	Gnas
Synonyms:	5530400H20Rik; A930027G11Rik; C130027O20Rik; G; Ga; Galphas; Gn; Gnas1; Gnasxl; GP5A; Gs-; Gs-alpha; Gsa; GSP; N; Nes; Nesp; Nesp55; NespI; Oed; Oed-Sml; Oedsml; P; P1; P2; P3; PHP1A; PHP1B; POH; SCG; SCG6; XL
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR225828).
Restriction Sites:	SgfI-RsrII
Cloning Scheme:	

Cloning sites used for ORF Shuttling:



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                                Kozak
                                Consensus
                                _____
          EcoRI      BamHI      RBS      SgfI      ORF
CTATAGGGCGCCGGGAATTCGTGCACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGC C ATG --- ---
                                _____
          RsrII      MluI      NotI      XhoI      Myc.Tag
--- --- --- NNN AGC GGA CCG ACG CGT ACG CGG CCG CTC GAG CAG AAA CTC ATC TCA GAA GAG
                   S   G   P   T   R   T   R   P   L   E   Q   K   L   I   S   E   E
                                _____
                                DDK.Tag
GAT CTG GCA GCA AAT GAT ATC CTG GAT TAC AAG GAT GAC GAC GAT AAG GTT TGGGTAGGAAG
  D   L   A   A   N   D   I   L   D   Y   K   D   D   D   D   K   V
  
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* The last codon before the Stop codon of the ORF.



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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]