

## Product datasheet for RR200464L4V

## OriGene Technologies, Inc.

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## **Gnas (NM\_001024823) Rat Tagged ORF Clone Lentiviral Particle**

**Product data:** 

**Product Type:** Lentiviral Particles

**Product Name:** Gnas (NM\_001024823) Rat Tagged ORF Clone Lentiviral Particle

Symbol: Gnas

Synonyms: ALEX; G-alpha-8; Gnas1; Gnpas; Nesp55; SCG6

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_001024823

ORF Size: 2220 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RR200464).

Sequence:

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.

**RefSeq:** NM 001024823.4, NP 001019994.4

RefSeq Size: 3826 bp
RefSeq ORF: 2223 bp
Locus ID: 24896
Cytogenetics: 3q43







## **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]