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Product datasheet for TL500832

Gnas Mouse shRNA Plasmid (Locus ID 14683)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Gnas Mouse shRNA Plasmid (Locus ID 14683)
Locus ID:	14683
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:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	Gnas - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 14683). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	NM_001077507, NM_001077510, NM_010309, NM_010310, NM_019690, NM_022000, NM_201616, NM_201617, NM_201618, NR_003258, NM_022000.1, NM_022000.2, NM_022000.3, NM_010309.1, NM_010309.2, NM_010309.3, NM_010309.4, NM_001077507.1, NM_001077507.2, NM_201618.1, NM_201618.2, NM_201617.1, NM_201617.2, NM_001077510.1, NM_001077510.2, NM_001077510.3, NM_001077510.4, NM_201616.1, NM_201616.2, NM_019690.1, NM_019690.2, NM_019690.3, BC013824, BC013840, BC018408, BC034446, BC038067, BC048834, BC052228, BC061496, BC062654, BC080816, BC092055, BC106133, BM944582, NM_201616.3, NM_001077510.5
UniProt ID:	P63094

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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]

shRNA Design:

These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).