

**GNAS Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO2042a****Specification****GNAS Antibody - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | E, WB, IF, FC          |
| Primary Accession | <a href="#">P84996</a> |
| Reactivity        | Human                  |
| Host              | Mouse                  |
| Clonality         | Monoclonal             |
| Isotype           | IgG1                   |
| Calculated MW     | 68kDa KDa              |

**Description**

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. An antisense transcript is produced from an overlapping locus on the opposite strand. One of the transcripts produced from this locus, and the antisense transcript, are 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. Multiple transcript variants encoding different isoforms have been found for this gene. Mutations in this gene result in pseudohypoparathyroidism type 1a, pseudohypoparathyroidism type 1b, Albright hereditary osteodystrophy, pseudopseudohypoparathyroidism, McCune-Albright syndrome, progressive osseous heteroplasia, polyostotic fibrous dysplasia of bone, and some pituitary tumors. [provided by RefSeq, Aug 2012]

**Immunogen**

Purified recombinant fragment of human GNAS (AA: 42-188) expressed in E. Coli.

**Formulation**

Purified antibody in PBS with 0.05% sodium azide

**GNAS Antibody - Additional Information****Gene ID 2778****Other Names**

Protein ALEX, Alternative gene product encoded by XL-exon, GNAS ([http://www.genenames.org/cgi-bin/gene\\_symbol\\_report?hgnc\\_id=4392](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=4392))  
HGNC:4392

**Dilution**

E~~1/10000

WB~~1/500 - 1/2000

IF~~1/200 - 1/1000  
FC~~1/200 - 1/400

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

GNAS Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**GNAS Antibody - Protein Information**

**Name** GNAS ([HGNC:4392](#))

**Function**

May inhibit the adenylyl cyclase-stimulating activity of guanine nucleotide-binding protein G(s) subunit alpha which is produced from the same locus in a different open reading frame.

**Cellular Location**

Cell membrane; Peripheral membrane protein. Cell projection, ruffle. Note=Predominantly associated with cell membrane ruffles.

**GNAS Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)