

# **GNAS Polyclonal Antibody**

Catalog No. A5546 Category Polyclonal Antibodies

**Observed MW Applications** WB 72kDa

**Cross-reactivity** Human, Mouse Calculated MW 28kDa/44kDa/45kDa/77kDa/109kDa/111kDa

### **Immunogen Information**

**Immunogen** Recombinant fusion protein containing a sequence corresponding to amino acids 1-394

of human GNAS (NP 000507.1).

Gene ID

Swiss prot O95467/P63092/P84996/Q5JWF2

Synonyms GNAS; AHO; C20orf45; GNAS1; GPSA; GSA; GSP; NE

SP; POH; SCG6; SgVI; protein ALEX

### **Product information**

Rabbit Source Isotype IgG

**Purification method** Affinity purification

Storage

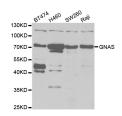
Store at -20 °C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

## **Background**

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 reponses. 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 osseus heteroplasia, polyostotic fibrous dysplasia of bone, and some pituitary tumors.

#### **Recommended Dilutions**

WB 1:500 - 1:2000



Western blot - GNAS Polyclonal Antibody (A5546)