

Product datasheet for **TA346203**

G protein alpha S (GNAS) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	The immunogen for anti-GNAS antibody: synthetic peptide directed towards the N terminal of human GNAS. Synthetic peptide located within the following region: NPENQFRVDYILSVMNVPDFDFPPEFYEHAKALWEDEGVRACYERSNEYQ
Formulation:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose. <i>Note that this product is shipped as lyophilized powder to China customers.</i>
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	46 kDa
Gene Name:	GNAS complex locus
Database Link:	NP_000507 Entrez Gene 2778 Human P84996

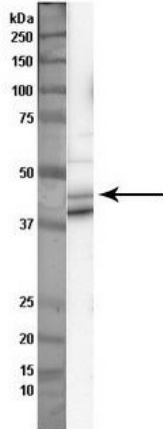


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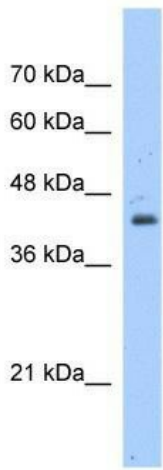
Background:	<p>Mutations in GNAS gene result in pseudohypoparathyroidism type 1a, pseudohypoparathyroidism type 1b, Albright hereditary osteodystrophy, pseudopseudohypoparathyroidism, McCune-Albright syndrome, progressive osseous heteroplasia, polyostotic fibrous dysplasia of bone, and some pituitary tumors. This gene has a highly complex imprinted expression pattern. It encodes maternally, paternally, and biallelically expressed proteins which are derived from alternatively spliced transcripts with alternate 5' exons. Each of the upstream exons is within a differentially methylated region, commonly found in imprinted genes. However, the close proximity (14 kb) of two oppositely expressed promoter regions is unusual. In addition, one of the alternate 5' exons introduces a frameshift relative to the other transcripts, resulting in one isoform which is structurally unrelated to the others. An antisense transcript exists, and may regulate imprinting in this region. Mutations in this gene result in pseudohypoparathyroidism type 1a (PHP1a), which has an atypical autosomal dominant inheritance pattern requiring maternal transmission for full penetrance. There are RefSeqs representing four transcript variants of this gene. Other transcript variants including four additional exons have been described; however, their full length sequences have not been determined. 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 contains 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 exists, and this antisense transcript and one of the transcripts are paternally expressed, produce 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 have been found for this gene, but the full-length nature and/or biological validity of some variants have not been determined. 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.</p>
Synonyms:	AHO; C20orf45; GNAS1; GPSA; GSA; GSP; NESP; PHP1A; PHP1B; PHP1C; POH; SgVI
Note:	Immunogen Sequence Homology: Dog: 100%; Pig: 100%; Rat: 100%; Horse: 100%; Human: 100%; Bovine: 100%; Rabbit: 100%; Guinea pig: 100%; Mouse: 93%
Protein Families:	Druggable Genome, Secreted Protein
Protein Pathways:	Calcium signaling pathway, Dilated cardiomyopathy, Gap junction, GnRH signaling pathway, Long-term depression, Melanogenesis, Taste transduction, Vascular smooth muscle contraction, Vibrio cholerae infection

Product images:

GNAS



Sample Type: Nthy-ori cell lysate (50ug); Primary Dilution: 1: 1000; Secondary Antibody: anti-rabbit HRP; Secondary Dilution: 1: 2000; Image Submitted By: Anonymous



WB Suggested Anti-GNAS Antibody Titration: 1.25 ug/ml; Positive Control: Jurkat cell lysate There is BioGPS gene expression data showing that GNAS is expressed in Jurkat



Human MCF7