OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for TA329505

G protein alpha S (GNAS) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB, IHC
Reactivity:	Human, Mouse
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: SGKSTIVKQMRILHVNGFNGDSEKATKVQDIKNNLKEAIETIVAAMSNLV
Formulation:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose. *Note that this product is shipped as lyophilized powder to China customers.*
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	42 kDa
Gene Name:	GNAS complex locus
Database Link:	NP_536351 Entrez Gene 14683 MouseEntrez Gene 2778 Human P84996

View online »

Background: Mutations in GNAS 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.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.

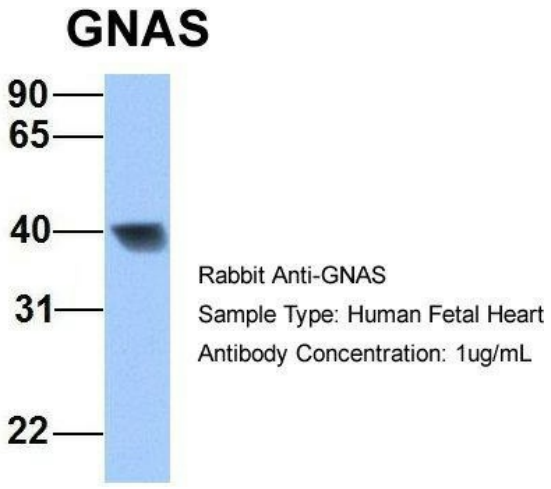
Synonyms: AHO; C20orf45; GNAS1; GPSA; GSA; GSP; NESP; PHP1A; PHP1B; PHP1C; POH; SgVI

Note: Immunogen sequence homology: Pig: 100%; Rat: 100%; Human: 100%; Mouse: 100%; Bovine: 93%; Rabbit: 93%

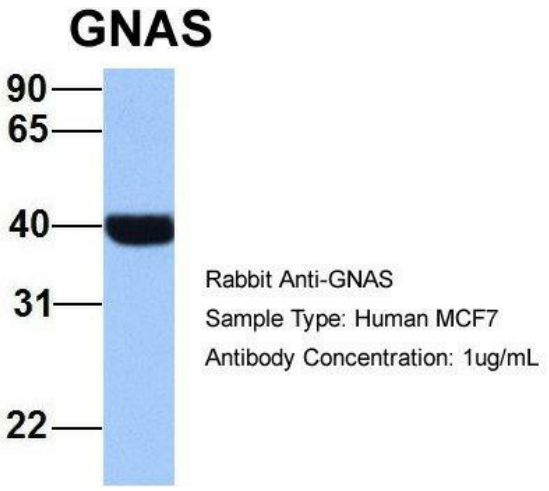
Protein Families: Druggable Genome, Secreted Protein

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:

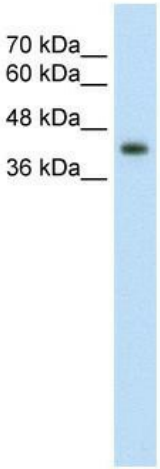


3Hum. Fetal Heart; Host: Rabbit; Target Name: GNAS; Sample Tissue: Human Fetal Heart; Antibody Dilution: 1.0ug/ml

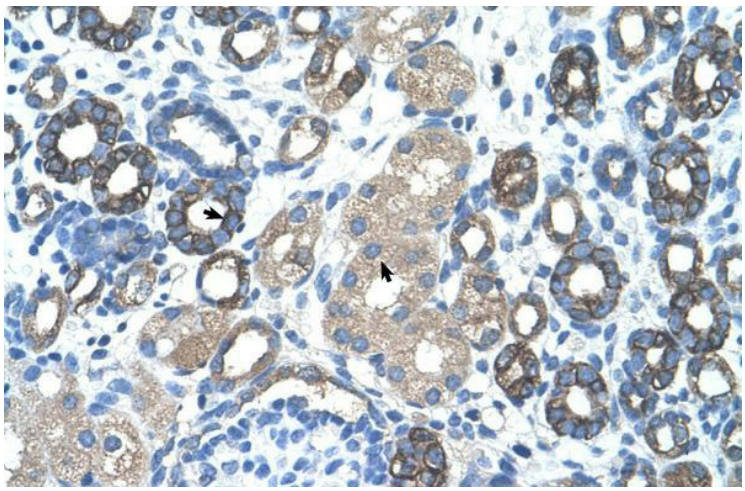


4Human MCF7; Host: Rabbit; Target Name: NOP56; Sample Tissue: MCF7; Antibody Dilution: 1.0ug/ml; GNAS is strongly supported by BioGPS gene expression data to be expressed in Human MCF7 cells

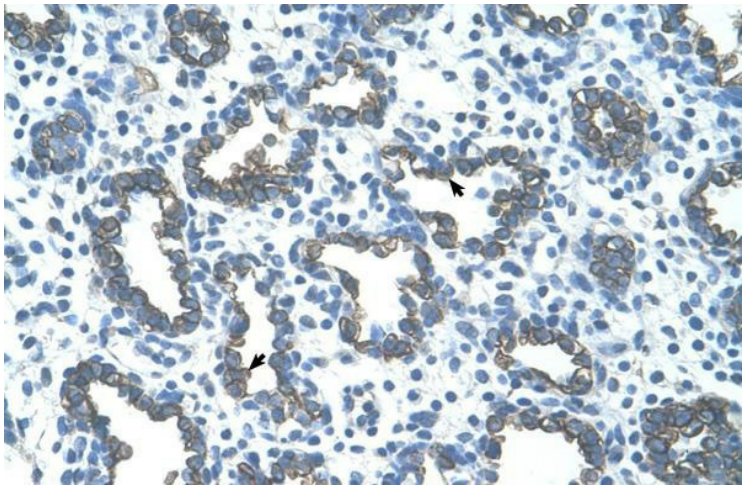
WB Suggested Anti-GNAS Antibody Titration: 1 ug/mL; Positive Control: HepG2 lysateThere is BioGPS gene expression data showing that GNAS is expressed in HepG2



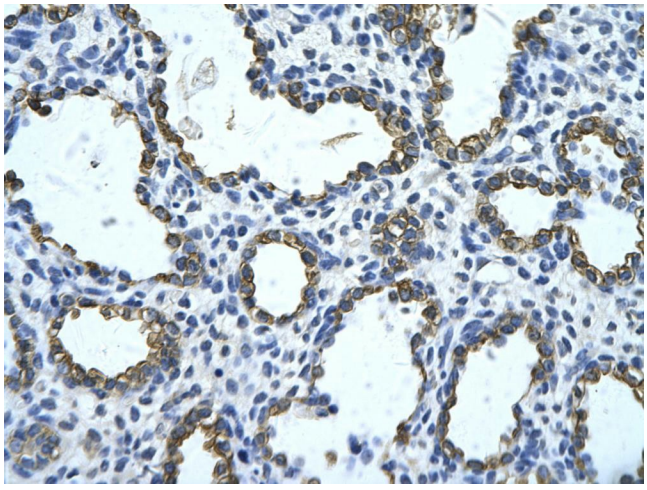
WB Suggested Anti-GNAS Antibody Titration: 2.5 ug/ml; Positive Control: Jurkat cell lysateThere is BioGPS gene expression data showing that GNAS is expressed in Jurkat



Human kidney



Human Lung



Rabbit Anti-GNAS Antibody; Paraffin Embedded Tissue: Human alveolar cell; Cellular Data: Epithelial cells of renal tubule; Antibody Concentration: 4.0-8.0 ug/ml; Magnification: 400X