

Product datasheet for **TA308888**

G protein alpha S (GNAS) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	IHC:1:100-1:1000; WB:1:500-1:3000
Reactivity:	Human, Mouse (Predicted: Dog, Pig, Bovine)
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant fragment corresponding to a region within amino acids 807 and 1037 of GNAS (Uniprot ID#Q5JWF2)
Formulation:	0.1M Tris, 0.1M Glycine, 10% Glycerol (pH7). 0.01% Thimerosal was added as a preservative.
Concentration:	lot specific
Purification:	Purified by antigen-affinity chromatography.
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 14683 Mouse Entrez Gene 403943 Dog Entrez Gene 2778 Human P84996



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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 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 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. [provided by RefSeq]

Synonyms:

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

Note:

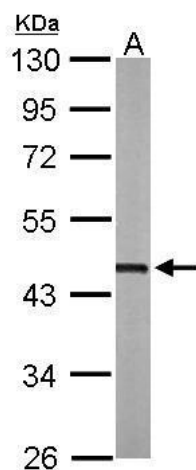
Seq homology of immunogen across species: Dog (100%), Pig (100%), Bovine (100%)

Protein Families:

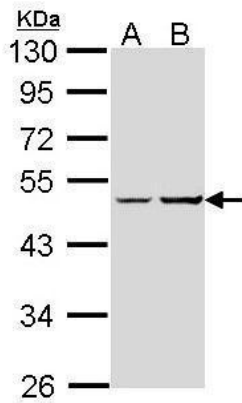
Druggable Genome, Secreted Protein

Protein Pathways:

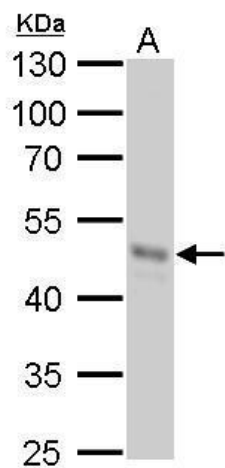
Calcium signaling pathway, Dilated cardiomyopathy, Gap junction, GnRH signaling pathway, Long-term depression, Melanogenesis, Taste transduction, Vascular smooth muscle contraction, Vibrio cholerae infection

Product images:

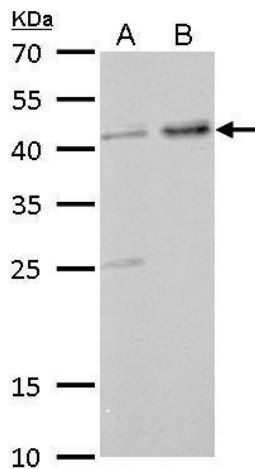
Sample (50 ug of whole cell lysate). A: Mouse brain. 10% SDS PAGE. TA308888 diluted at 1:1000.



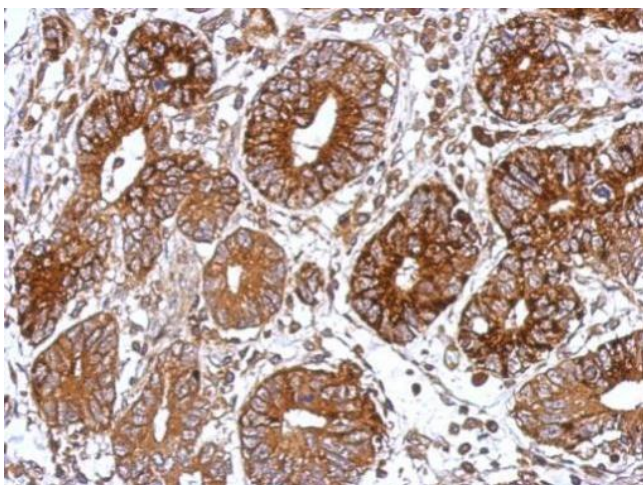
Sample (30 ug of whole cell lysate). A: Hep G2. B: Raji. 10% SDS PAGE. TA308888 diluted at 1:1000.



GNAS antibody [C2C3-2], C-term detects GNAS protein by Western blot analysis. A. 50 ug rat brain lysate/extract. 10 % SDS-PAGE. GNAS antibody [C2C3-2], C-term (TA308888) dilution: 1:1000



GNAS antibody [C2C3-2], C-term detects GNAS protein by Western blot analysis. A. 30 ug NIH-3T3 whole cell lysate/extract. B. 30 ug Jc whole cell lysate/extract. 12 % SDS-PAGE. GNAS antibody [C2C3-2], C-term (TA308888) dilution: 1:1000



Immunohistochemical analysis of paraffin-embedded Colon ca, using GNAS (TA308888) antibody at 1:500 dilution.