

Product datasheet for **AP23581PU-N**

G protein alpha S (GNAS) (164-394) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	Immunohistochemistry on Paraffin Sections: 5 µg/ml. Western Blot: 1/500 - 1/3000.
Reactivity:	Bovine, Human, Mouse, Porcine, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Recombinant protein fragment containing a sequence corresponding to a region within amino acids 164 and 394 of Human GNAS
Specificity:	This antibody reacts to Guanine Nucleotide-binding Protein G(S), Alpha Subunit (GNAS).
Formulation:	0.1 M Tris-glycine, pH 7.0 containing 10% Glycerol as stabilizer and 0.01% Thimerosal as preservative State: Aff - Purified State: Liquid purified Ig fraction
Concentration:	lot specific
Purification:	Immunoaffinity Chromatography
Conjugation:	Unconjugated
Storage:	Store the antibody at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	GNAS complex locus
Database Link:	Entrez Gene 14683 Mouse Entrez Gene 24896 Rat Entrez Gene 2778 Human P84996



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Background:

The GNAS1 gene encodes the alpha subunit of the G protein Gs, which couples receptor binding by several hormones to activation of adenylate cyclase (Hayward et al., 1998). 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 reponses. 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 osseus heteroplasia, polyostotic fibrous dysplasia of bone, and some pituitary tumors.

Synonyms:

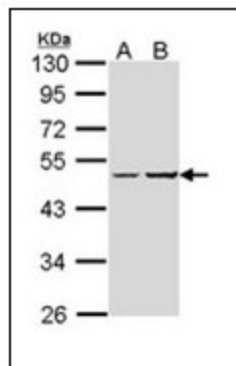
Extra large alphas protein, G protein alpha XLas

Protein Families:

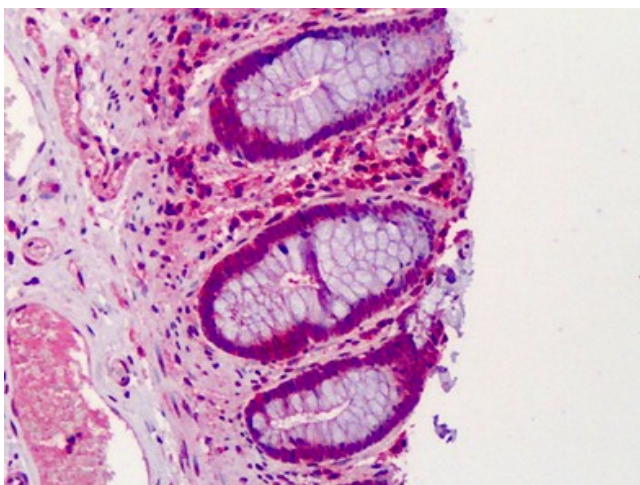
Druggable Genome, Secreted Protein

Protein Pathways:

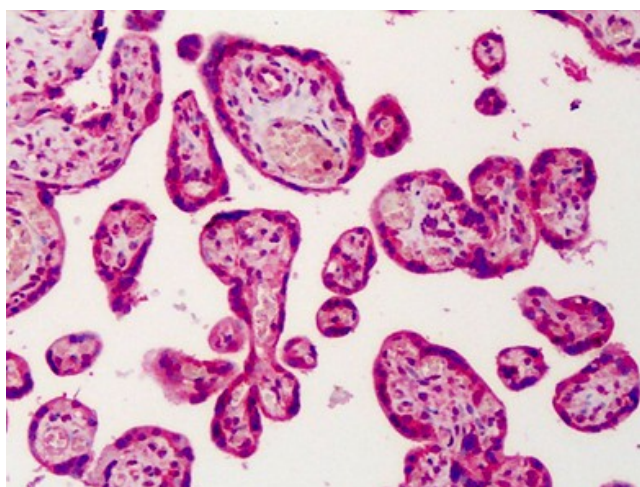
Calcium signaling pathway, Dilated cardiomyopathy, Gap junction, GnRH signaling pathway, Long-term depression, Melanogenesis, Taste transduction, Vascular smooth muscle contraction, Vibrio cholerae infection

Product images:

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



Human Colon: Formalin-Fixed, Paraffin-Embedded (FFPE)



Human Placenta: Formalin-Fixed, Paraffin-Embedded (FFPE)