

**GNAS Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP13065b****Specification**

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**GNAS Antibody (C-term) - Product Information**

Application	WB, IF, FC, IHC-P,E
Primary Accession	<a href="#">Q5FWY2</a>
Other Accession	<a href="#">P29797</a> , <a href="#">Q8R4A8</a> , <a href="#">P63095</a> , <a href="#">P63094</a> , <a href="#">P63092</a> , <a href="#">P04896</a> , <a href="#">Q63803</a> , <a href="#">Q6R0H7</a> , <a href="#">Q5JWF2</a>
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Hamster, Pig
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	287-315

**GNAS Antibody (C-term) - Additional Information****Gene ID** 2778**Other Names**  
GNAS**Target/Specificity**

This GNAS antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 287-315 amino acids from the C-terminal region of human GNAS.

**Dilution**

WB~~1:1000  
IF~~1:10~50  
FC~~1:10~50  
IHC-P~~1:10~50  
E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

GNAS Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**GNAS Antibody (C-term) - Protein Information**

**Name** GNAS {ECO:0000313|EMBL:AAH89157.2}

**Function** Guanine nucleotide-binding protein (G protein) involved as transducer in olfactory signal transduction controlled by G protein- coupled receptors (GPCRs). Contains the guanine nucleotide binding site and alternates between an active, GTP-bound state and an inactive, GDP- bound state. Signaling by an activated GPCR promotes GDP release and GTP binding. The alpha subunit has a low GTPase activity that converts bound GTP to GDP, thereby terminating the signal. Both GDP release and GTP hydrolysis are modulated by numerous regulatory proteins. GNAL/G(olf) alpha specifically mediates olfactory signal transduction within the olfactory neuroepithelium and the basal ganglia following GPCRs activation. Acts by promoting the specific activation of adenylyl cyclase ADCY3, resulting in increased levels of the signaling molecule cAMP.

**Cellular Location**

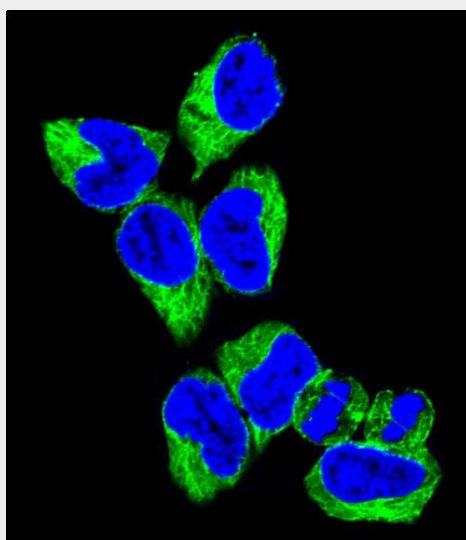
Cell membrane {ECO:0000256|ARBA:ARBA00004193}; Lipid-anchor {ECO:0000256|ARBA:ARBA00004193}

**GNAS Antibody (C-term) - Protocols**

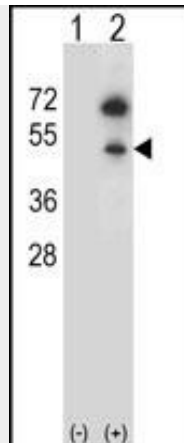
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

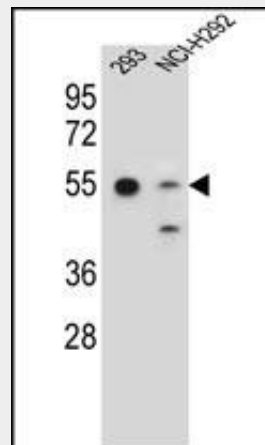
**GNAS Antibody (C-term) - Images**



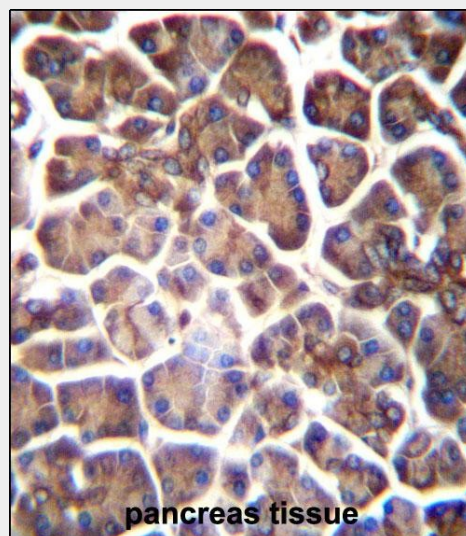
Confocal immunofluorescent analysis of GNAS Antibody (C-term)(Cat#AP13065b) with 293 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green).DAPI was used to stain the cell nuclear (blue).



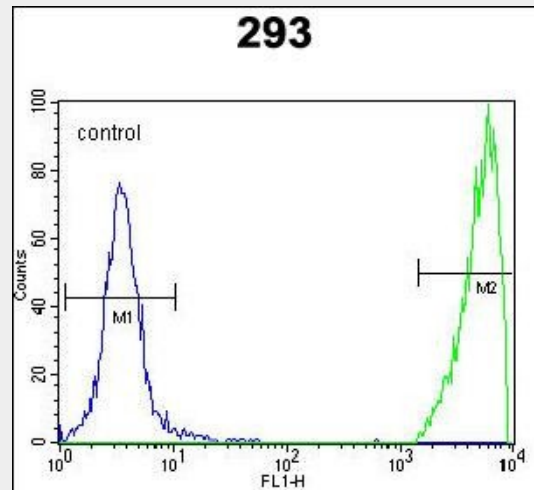
Western blot analysis of GNAS (arrow) using rabbit polyclonal GNAS Antibody (C-term) (Cat. #AP13065b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the GNAS gene.



GNAS Antibody (C-term) (Cat. #AP13065b) western blot analysis in 293, NCI-H292 cell line lysates (35ug/lane). This demonstrates the GNAS antibody detected the GNAS protein (arrow).



GNAS Antibody (C-term) (Cat. #AP13065b) immunohistochemistry analysis in formalin fixed and paraffin embedded human pancreas tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of GNAS Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



GNAS Antibody (C-term) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

### GNAS Antibody (C-term) - Background

Guanine nucleotide-binding proteins (G proteins) are involved as modulators or transducers in various transmembrane signaling systems. The Gs protein is involved in hormonal regulation of adenylate cyclase: it activates the cyclase in response to beta-adrenergic stimuli. Alternative splicing of downstream exons of the GNAS gene is 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.