

# GNAS Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP21831a

## Product Information

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Application	WB, E
Primary Accession	<a href="#">P63092</a>
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB54063
Calculated MW	45665

## Additional Information

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Gene ID	2778
Other Names	Guanine nucleotide-binding protein G(s) subunit alpha isoforms short, Adenylate cyclase-stimulating G alpha protein, GNAS, GNAS1, GSP
Target/Specificity	This GNAS antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 51-83 amino acids from human GNAS.
Dilution	WB~~1:8000 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 (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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Name	GNAS
Synonyms	GNAS1, GSP
Function	Guanine nucleotide-binding proteins (G proteins) function as transducers in numerous signaling pathways controlled by G protein- coupled receptors (GPCRs) (PubMed: <a href="#">12391161</a> , PubMed: <a href="#">17110384</a> , PubMed: <a href="#">21488135</a> , PubMed: <a href="#">26206488</a> , PubMed: <a href="#">8702665</a> , PubMed: <a href="#">10200251</a> ). The alpha chain

contains the guanine nucleotide binding site and alternates between an active, GTP-bound state and an inactive, GDP-bound state (PubMed:[12391161](#), PubMed:[17110384](#), PubMed:[10200251](#)). Signaling by an activated GPCR promotes GDP release and GTP binding (PubMed:[12391161](#), PubMed:[17110384](#), PubMed:[10200251](#)). The alpha subunit has a low GTPase activity that converts bound GTP to GDP, thereby terminating the signal (PubMed:[12391161](#), PubMed:[17110384](#), PubMed:[10200251](#)). Both GDP release and GTP hydrolysis are modulated by numerous regulatory proteins (PubMed:[12391161](#), PubMed:[17110384](#), PubMed:[10200251](#)). Signaling involves the activation of adenylyl cyclases, resulting in increased levels of the signaling molecule cAMP (PubMed:[17110384](#), PubMed:[26206488](#), PubMed:[26206488](#), PubMed:[8702665](#)). Functions downstream of beta-adrenergic receptors (PubMed:[21488135](#)). Stimulates the Ras signaling pathway via RAPGEF2 (PubMed:[12391161](#)).

## Cellular Location

Cell membrane {ECO:0000250|UniProtKB:P63094}; Lipid-anchor {ECO:0000250|UniProtKB:P63094}

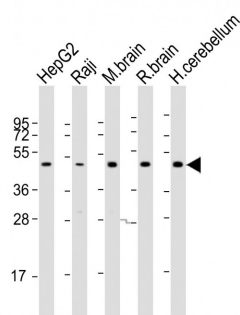
## Background

Guanine nucleotide-binding proteins (G proteins) are involved as modulators or transducers in various transmembrane signaling systems. The G(s) protein is involved in hormonal regulation of adenylyl cyclase: it activates the cyclase in response to beta-adrenergic stimuli. Stimulates the Ras signaling pathway via RAPGEF2.

## References

Mattera R.,et al.FEBS Lett. 206:36-42(1986).  
Harris B.A.,et al.Nucleic Acids Res. 16:3585-3585(1988).  
Kozasa T.,et al.Proc. Natl. Acad. Sci. U.S.A. 85:2081-2085(1988).  
Puhl H.L. III,et al.Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases.  
Kalnine N.,et al.Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.

## Images



All lanes : Anti-GNAS Antibody (N-Term) at 1:8000 dilution  
Lane 1: HepG2 whole cell lysate Lane 2: Raji whole cell lysate Lane 3: mouse brain lysate Lane 4: rat brain lysate Lane 5: human cerebellum lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 46 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.