

GNAS Antibody (N-Term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21831a**Specification**

GNAS Antibody (N-Term) - Product Information

Application	WB,E
Primary Accession	P63092
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	45665
Antigen Region	51-83

GNAS Antibody (N-Term) - Additional Information**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.

GNAS Antibody (N-Term) - Protein Information**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:[12391161](#), PubMed:[17110384](#), PubMed:[21488135](#), PubMed:[26206488](#), PubMed:[8702665](#), PubMed:[10200251](#)). 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:[8702665](#)). Functions downstream of beta- adrenergic receptors (PubMed:[21488135](#)). Stimulates the Ras signaling pathway via RAPGEF2 (PubMed:[12391161](#)).

Cellular Location

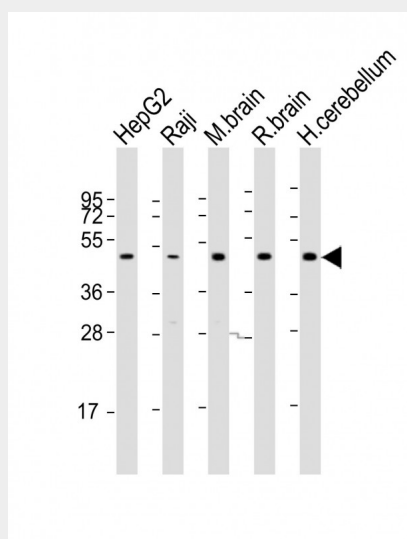
Cell membrane {ECO:0000250|UniProtKB:P63094}; Lipid-anchor {ECO:0000250|UniProtKB:P63094}

GNAS Antibody (N-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 (N-Term) - 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.

GNAS Antibody (N-Term) - 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 adenylate cyclase: it activates the cyclase in response to beta-adrenergic stimuli. Stimulates the Ras signaling pathway via RAPGEF2.

GNAS Antibody (N-Term) - 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.