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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

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:26206488, PubMed:8702665). Functions downstream of beta- adrenergic receptors (PubMed:21488135). Stimulates the Ras signaling pathway via RAPGEF2 (PubMed:12391161).

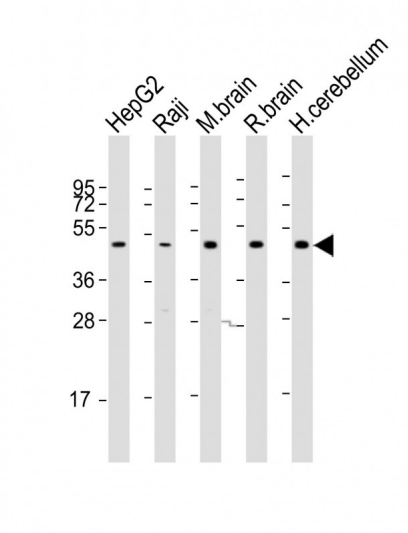
Cellular Location
Cell membrane {ECO:0000250|UniProtKB:P63094}; Lipid-anchor {ECO:0000250|UniProtKB:P63094}

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 Cytomety
- 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.
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