ARG43291
anti-GNAS antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes GNAS
Tested Reactivity	Hu, Ms, Rat
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	GNAS
Species	Human
Immunogen	KLH-conjugated synthetic peptide between aa. 51-83 of Human GNAS.
Conjugation	Un-conjugated
Alternate Names	AHO; GSA; GSP; POH; GPSA; NESP; SCG6; SgVI; GNAS1; C20orf45; Guanine nucleotide-binding protein G(s) subunit alpha isoforms XLas; Adenylate cyclase-stimulating G alpha protein; Extra large alphas protein; XLalphas

Application Instructions

Application table

Application	Dilution
WB	1:8000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	HepG2
Observed Size	~ 47 kDa

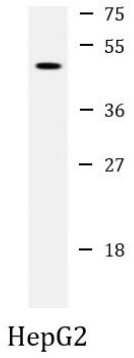
Properties

Form	Liquid
Purification	Purification with Protein A and immunogen peptide.
Buffer	PBS and 0.09% (W/V) Sodium azide.
Preservative	0.09% (W/V) Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	GNAS
Gene Full Name	GNAS complex locus
Background	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 contain 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 is produced from an overlapping locus on the opposite strand. One of the transcripts produced from this locus, and the antisense transcript, are paternally expressed 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 encoding different isoforms have been found for this gene. 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. [provided by RefSeq, Aug 2012]
Function	Guanine nucleotide-binding proteins (G proteins) function as transducers in numerous signaling pathways controlled by G protein-coupled receptors (GPCRs). Signaling involves the activation of adenylyl cyclases, resulting in increased levels of the signaling molecule cAMP. GNAS functions downstream of several GPCRs, including beta-adrenergic receptors. XLas isoforms interact with the same set of receptors as GNAS isoforms (By similarity). [UniProt]
Calculated Mw	Isoform Gnas-1: 46 kDa
PTM	Binds keratan sulfate chains. May be proteolytically processed to give rise to a number of active peptides. [UniProt]
Cellular Localization	Cell membrane; Peripheral membrane protein. Cell projection, ruffle. Note=Predominantly associated with cell membrane ruffles. [UniProt]

Images



ARG43291 anti-GNAS antibody WB image

Western blot: 20 µg of HepG2 whole cell lysate stained with ARG43291 anti-GNAS antibody at 1:8000 dilution.