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GNAS Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6865c

Product Information

Application	WB, E
Primary Accession	Q5JWF2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB17867
Calculated MW	111025
Antigen Region	640-667

Additional Information

Gene ID	2778
Other Names	Guanine nucleotide-binding protein G(s) subunit alpha isoforms XLas, Adenylate cyclase-stimulating G alpha protein, Extra large alphas protein, XLalphas, GNAS, GNAS1 {ECO:0000303|PubMed:9707596}
Target/Specificity	This GNAS antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 640-667 amino acids from the Central region of human GNAS.
Dilution	WB~~1:1000 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 (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GNAS
Synonyms	GNAS1 {ECO:0000303|PubMed:9707596}
Function	Guanine nucleotide-binding proteins (G proteins) function as transducers in

numerous signaling pathways controlled by G protein- coupled receptors (GPCRs). The alpha chain 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. 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.

Cellular Location Cell membrane; Peripheral membrane protein {ECO:0000250|UniProtKB:Q63803}. Apical cell membrane

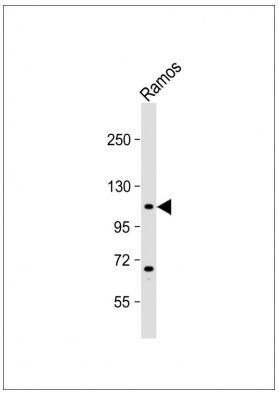
Background

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. XLas isoforms interact with the same set of receptors as Gnas isoforms.

References

Liu,C., et.al., Eur Arch Otorhinolaryngol (2009)
Nishihara,E., et.al., Endocr. J. 56 (6), 791-798 (2009)

Images



Anti-GNAS Antibody (Center) at 1:4000 dilution + Ramos whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 111 kDa Blocking/Dilution buffer: 5% NFDM/TBST.