

GNAS Antibody

Purified Mouse Monoclonal Antibody

Catalog # AO2043a

Product Information

Application	WB, IHC, FC, E
Primary Accession	P84996
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2A2B7
Isotype	IgG2a
Calculated MW	67948
Description	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 responses. 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]
Immunogen	Purified recombinant fragment of human GNAS (AA: 42-188) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	2778
Other Names	Protein ALEX, Alternative gene product encoded by XL-exon, GNAS (HGNC:4392)
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 E~~1/10000

Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	GNAS Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GNAS (HGNC:4392)
Function	May inhibit the adenylyl cyclase-stimulating activity of guanine nucleotide-binding protein G(s) subunit alpha which is produced from the same locus in a different open reading frame.
Cellular Location	Cell membrane; Peripheral membrane protein. Cell projection, ruffle. Note=Predominantly associated with cell membrane ruffles.

References

Br J Cancer. 2013 Mar 5;108(4):951-8.Anticancer Res. 2012 May;32(5):2169-72.

Images

