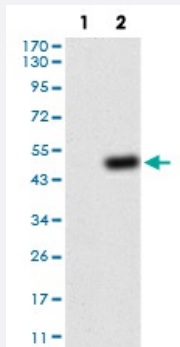


GNAS monoclonal antibody, clone 2A2B7

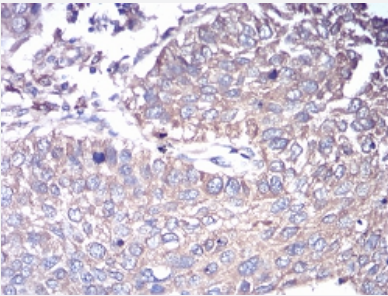
Catalog # MAB16694 Size 10 x 100 ug, 100 ug

Applications



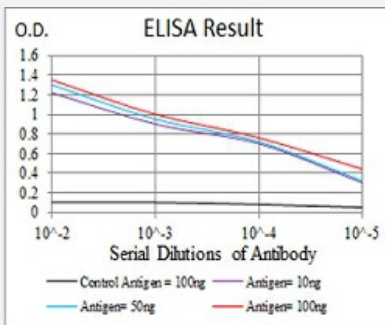
Western Blot (Transfected lysate)

Western blot analysis of Lane 1: HEK293 cell; Lane 2: GNAS-hlgGFc transfected HEK293 cell with GNAS monoclonal antibody.



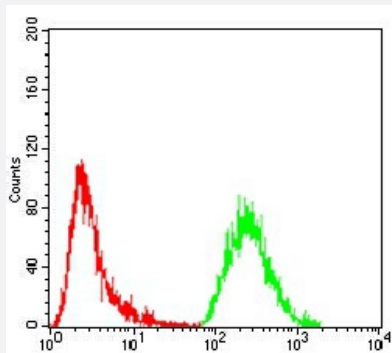
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining of paraffin-embedded lung cancer tissues with GNAS monoclonal antibody.



Enzyme-linked Immunoabsorbent Assay

ELISA analysis of GNAS monoclonal antibody, clone 2A2B7.



Flow Cytometry

Flow cytometric analysis of A549 cells with GNAS monoclonal antibody (green) and negative control (red).

Specification

Product Description	Mouse monoclonal antibody raised against recombinant human GNAS.
Immunogen	Recombinant protein corresponding to amino acid 42-188 of human GNAS from <i>E. coli</i> .
Host	Mouse
Theoretical MW (kDa)	68
Reactivity	Human
Form	Liquid
Isotype	IgG2a
Recommend Usage	ELISA (1:10000) Western Blot (1:500-1:2000) Immunohistochemistry (1:200-1:1000) Immunocytochemistry Flow Cytometry (1:200-1:400) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.05% sodium azide).
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Transfected lysate)

Western blot analysis of Lane 1: HEK293 cell; Lane 2: GNAS-hlgGfc transfected HEK293 cell with GNAS monoclonal antibody.

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining of paraffin-embedded lung cancer tissues with GNAS monoclonal antibody.

- Enzyme-linked Immunoabsorbent Assay

ELISA analysis of GNAS monoclonal antibody, clone 2A2B7.

- Flow Cytometry

Flow cytometric analysis of A549 cells with GNAS monoclonal antibody (green) and negative control (red).

Gene Info — GNAS

Entrez GeneID [2778](#)

Gene Name GNAS

Gene Alias AHO, C20orf45, GNAS1, GPSA, GSA, GSP, MGC33735, NESP, PHP1A, PHP1B, POH, dJ309 F20.1.1, dJ806M20.3.3

Gene Description GNAS complex locus

Omim ID [102200](#) [103580](#) [139320](#) [166350](#) [174800](#) [603233](#)

Gene Ontology [Hyperlink](#)

Gene Summary

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 contains 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 osseous heteroplasia, polyostotic fibrous dysplasia of bone, and some pituitary tumors. [provided by RefSeq]

Other Designations

OTTHUMP00000031740|OTTHUMP00000031756|OTTHUMP00000196026|OTTHUMP00000196030|adenylate cyclase-stimulating G alpha protein|guanine nucleotide binding protein (G protein), alpha stimulating activity polypeptide 1|guanine nucleotide regulatory protein|neuroe

Pathway

- [Calcium signaling pathway](#)
- [Gap junction](#)
- [GnRH signaling pathway](#)
- [Long-term depression](#)
- [Melanogenesis](#)
- [Taste transduction](#)
- [Vascular smooth muscle contraction](#)
- [Vibrio cholerae infection](#)

Disease

- [Adenocarcinoma](#)
- [Adenoma](#)
- [Adrenal Cortex Neoplasms](#)
- [Anorexia Nervosa](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Autonomic Nervous System Diseases](#)
- [Bile Duct Neoplasms](#)
- [Body Weight](#)
- [Bone Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Bulimia](#)

- [Calcinosis](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cholangiocarcinoma](#)
- [Colorectal Neoplasms](#)
- [Coronary Artery Disease](#)
- [Cushing Syndrome](#)
- [Depressive Disorder](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Edema](#)
- [Esophageal Neoplasms](#)
- [Fibrosarcoma](#)
- [Fibrous Dysplasia](#)
- [Genetic Predisposition to Disease](#)
- [Glaucoma](#)
- [Goiter](#)
- [Hemorrhage](#)
- [Hypertension](#)
- [Hypopharyngeal Neoplasms](#)
- [Hypotension](#)
- [Insulin Resistance](#)
- [Kidney Neoplasms](#)
- [Laryngeal Neoplasms](#)
- [Leukemia](#)
- [Malaria](#)

- [Migraine Disorders](#)
- [Myxoma](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Recurrence](#)
- [Obesity](#)
- [Oropharyngeal Neoplasms](#)
- [Osteoma](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Pituitary Neoplasms](#)
- [Polycystic Ovary Syndrome](#)
- [Prostate cancer](#)
- [Prostatic Hyperplasia](#)
- [Prostatic Neoplasms](#)
- [Prosthesis Failure](#)
- [Pseudohypoparathyroidism](#)
- [Psychiatric Status Rating Scales](#)
- [Recurrence](#)
- [Schizophrenia](#)
- [Schizophrenic Psychology](#)
- [Skin Neoplasms](#)
- [Soft Tissue Neoplasms](#)
- [Stomach Neoplasms](#)
- [Syncope](#)
- [Syndrome](#)
- [Takotsubo Cardiomyopathy](#)

- [Thrombosis](#)
- [Thyroid Nodule](#)
- [Thyrotoxicosis](#)
- [Urinary Bladder Neoplasms](#)
- [Weight Loss](#)