

CAB5546

Product Information

Size:

20uL, 50uL, 100uL, 200uL

Observed MW:

50kDa

Calculated MW:

28kDa/44kDa/45kDa/77kDa/
109kDa/111kDa

Applications:

WB IF IP

Reactivity:

Human, Mouse, Rat

Antibody Information

Recommended dilutions:

WB 1:500 - 1:2000 IF 1:50 -
1:200 IP 1:50 - 1:200

Source:

Rabbit

Isotype:

IgG

Purification:

Affinity purification

Protein 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 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.

Immunogen information

Gene ID:

2778

Uniprot

O95467/P63092/P84996/Q5JWF2

Synonyms:

GNAS; AHO; C20orf45; GNAS1; GPSA; GSA; GSP; NESP; POH; SCG6;
SgVI

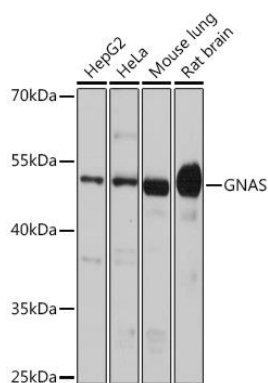
Immunogen:

Recombinant fusion protein containing a sequence corresponding to amino acids 1-394 of human GNAS (NP_000507.1).

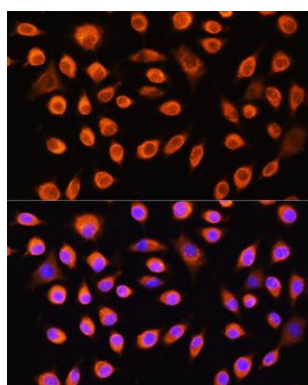
Storage:

Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

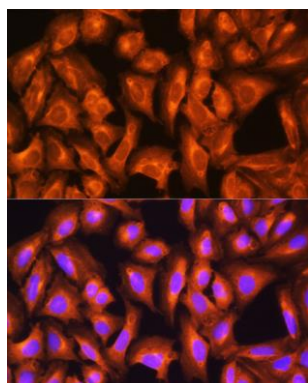
Product Images



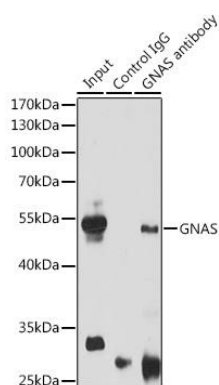
Western blot analysis of extracts of various cell lines, using GNAS antibody (CAB5546) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (CABS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (CABM00020). Exposure time: 30s.



Immunofluorescence analysis of L929 cells using GNAS Rabbit pAb (CAB5546) at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of U2OS cells using GNAS Rabbit pAb (CAB5546) at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunoprecipitation analysis of 200ug extracts of Mouse brain cells using 3ug GNAS antibody (CAB5546). Western blot was performed from the immunoprecipitate using GNAS antibody (CAB5546) at a dilution of 1:1000.