Datasheet for ABIN2775542

anti-GNAS antibody (N-Term)

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Overview

Quantity:	100 µL
Target:	GNAS
Binding Specificity:	N-Term
Reactivity:	Human, Mouse, Rat, Dog, Cow, Horse, Rabbit, Guinea Pig
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This GNAS antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Immunogen:	The immunogen is a synthetic peptide directed towards the N terminal region of human GNAS
Sequence:	VYRATHRLLL LGAGESGKST IVKQMRILHV NGFNGEGGEE DPQAARSNSD
Predicted Reactivity:	Cow: 100%, Dog: 100%, Guinea Pig: 100%, Horse: 100%, Human: 100%, Mouse: 100%, Rabbit: 93%, Rat: 100%
Characteristics:	This is a rabbit polyclonal antibody against GNAS. It was validated on Western Blot using a cell lysate as a positive control.
Purification:	Affinity Purified

Target Details

Target:	GNAS

Target Details

Alternative Name:	GNAS (GNAS Products)
Background:	Mutations in GNAS 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. 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 exists, and this antisense transcript and one of the transcripts are paternally expressed, produce 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 have been found for this gene, but the full-length nature and/or biological validity of some variants have not been determined. 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. Alias Symbols: AHO, C20orf45, GNAS1, GPSA, GSA, GSP, MGC33735, PHP1A, PHP1B, POH, dJ309F20.1.1, dJ806M20.3.3, NESP, PHP1C Protein Interaction Partner: PANX1, AXIN1, UBC, FUS, OPTN, PTGIR, HLA-A, ADRB2, NUCB2, NUCB1, LAMTOR1, SLC25A12, GNAQ, GNA11, UBD, TBXA2R, GNB1, AVPR2, SUMO1, PCK1, Ric8b, GNG2, CALM1, Haus1, Trim69, Cbx1, RIC8A, TTC1, SNX13, ADCY5, CRHR1, PTGDR, TSHR, CAV3, HTR6, RGS2, ADCY6, VIPR1, Protein Size: 394
Molecular Weight:	46 kDa
Gene ID:	2778
NCBI Accession:	NM_000516, NP_000507
UniProt:	P63092
Pathways:	Thyroid Hormone Synthesis, cAMP Metabolic Process, Myometrial Relaxation and Contraction, Embryonic Body Morphogenesis

Application Details

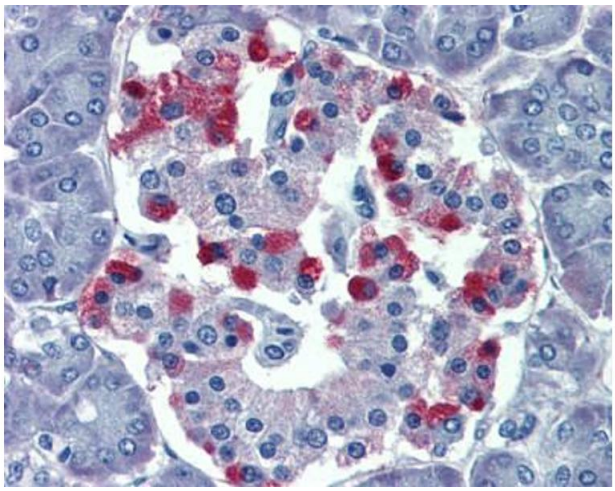
Application Notes:	Optimal working dilutions should be determined experimentally by the investigator.
Comment:	Antigen size: 394 AA
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	Lot specific
Buffer:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09 % (w/v) sodium azide and 2 % sucrose.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-20 °C
Storage Comment:	For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

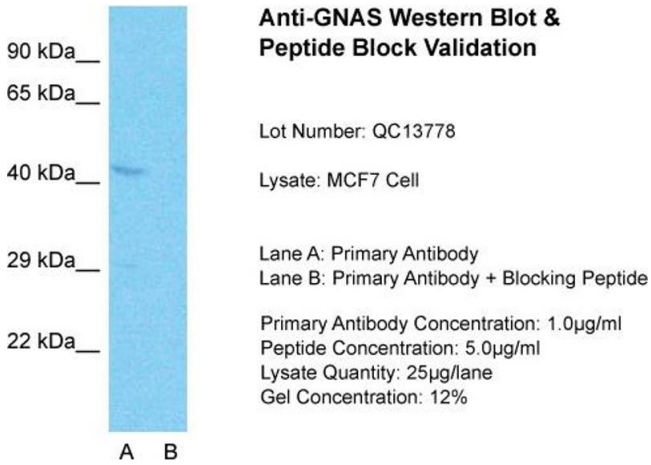
Publications

Product cited in:	Mullins, Crawford, Khuder, Hernandez, Yoon, Willey: "CEBPG transcription factor correlates with antioxidant and DNA repair genes in normal bronchial epithelial cells but not in individuals with bronchogenic carcinoma." in: **BMC cancer**, Vol. 5, pp. 141, (2005) (PubMed).



Immunohistochemistry

Image 1.



Western Blotting

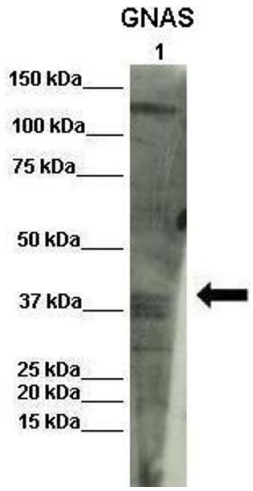
Image 2. Host: Rabbit

Target Name: GNAS

Sample Tissue: MCF7 Whole Cell

Lane A: Primary Antibody Lane B: Primary Antibody + Blocking Peptide

Primary Antibody Concentration: 1 µg/mL Peptide Concentration: 5 µg/mL Lysate Quantity: 41 µg/laneGel Concentration:.12 %



Western Blotting

Image 3. Lanes : Lane 1: INS1 lysate Primary Antibody Dilution : 1:1000 Secondary Antibody : Donkey anti-rabbit-HRP Secondary Antibody Dilution : 1:1000 Gene Name : GNAS Submitted by : Olivier Costa, Diabetes research center VUB

Please check the product details page for more images. Overall 9 images are available for ABIN2775542.