

Datasheet for ABIN6719526 **anti-GNAQ antibody (N-Term)**



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Overview

Quantity:	100 µg
Target:	GNAQ
Binding Specificity:	AA 102-138, N-Term
Reactivity:	Human, Mouse, Rat, Monkey
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This GNAQ antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Flow Cytometry (FACS)

Product Details

Purpose:	Anti-GNAQ Antibody Picoband® (monoclonal, 13H4)
Immunogen:	A synthetic peptide corresponding to a sequence at the N-terminus of human GNAQ, identical to the related mouse and rat sequences.
Sequence:	KYEHNKAHAQ LVREVDVEKV SAFENPYVDA IKSLWND
Clone:	13H4
Isotype:	IgG2b
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-GNAQ Antibody Picoband® (monoclonal, 13H4) (ABIN6719526). Tested in Flow Cytometry, IHC, WB applications. This antibody reacts with Human, Monkey, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity,

Product Details

and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

Purification: Immunogen affinity purified.

Target Details

Target:	GNAQ
Alternative Name:	GNAQ (GNAQ Products)
Background:	Synonyms: Guanine nucleotide-binding protein G (q) subunit alpha, Guanine nucleotide-binding protein alpha-q, GNAQ, GAQ Tissue Specificity: Predominantly expressed in ovary, prostate, testis and colon. Down-regulated in the peripheral blood lymphocytes (PBLs) of rheumatoid arthritis patients. Background: Guanine nucleotide-binding protein G (q) subunit alpha is a protein that in humans is encoded by the GNAQ gene. Guanine nucleotide-binding proteins are a family of heterotrimeric proteins that couple cell surface, 7-transmembrane domain receptors to intracellular signaling pathways. Receptor activation catalyzes the exchange of GDP for GTP bound to the inactive G protein alpha subunit resulting in a conformational change and dissociation of the complex. The G protein alpha and beta-gamma subunits are capable of regulating various cellular effectors. Activation is terminated by a GTPase intrinsic to the G-alpha subunit. G-alpha-q is the alpha subunit of one of the heterotrimeric GTP-binding proteins that mediates stimulation of phospholipase C-beta. Mutations in this gene have been found associated to cases of Sturge-Weber syndrome and port-wine stains.
Molecular Weight:	42 kDa
Gene ID:	2776
UniProt:	P50148
Pathways:	JAK-STAT Signaling , Thyroid Hormone Synthesis , Myometrial Relaxation and Contraction

Application Details

Application Notes:	Western blot, 0.1-0.5 µg/mL Immunohistochemistry (Paraffin-embedded Section), 0.5-1 µg/mL Flow Cytometry (Fixed), 1-3 µg/1x10⁶ cells 1. Dong Q, Shenker A, Way J, Haddad BR, Lin K, Hughes MR, McBride OW, Spiegel AM, Battey J (February 1997). "Molecular cloning of human G alpha q cDNA and chromosomal localization of
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Application Details

the G alpha q gene (GNAQ) and a processed pseudogene". Genomics 30 (3): 470-75. 2. Shirley MD, Tang H, Gallione CJ, Baugher JD, Frelin LP, Cohen B, North PE, Marchuk DA, Comi AM, Pevsner J (May 23, 2013). "Sturge-Weber syndrome and port-wine stains caused by somatic mutation in GNAQ.". The New England Journal of Medicine 368 (21): 1971-9.

Comment: Tested Species: In-house tested species with positive results. By Heat: Boiling the paraffin sections in 10mM citrate buffer, pH6.0, for 20mins is required for the staining of formalin/paraffin sections. Other applications have not been tested. Optimal dilutions should be determined by end users.

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Concentration: 500 µg/mL

Buffer: Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na₂HPO₄, 0.05 mg Sodium azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C, -20 °C

Storage Comment: Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.