

Anti-GNAQ Picoband Antibody
Catalog # ABO12393**Specification**

Anti-GNAQ Picoband Antibody - Product Information

Application	WB, IHC
Primary Accession	P50148
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Guanine nucleotide-binding protein G(q) subunit alpha(GNAQ) detection. Tested with WB, IHC-P in Human;Rat;Mouse.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-GNAQ Picoband Antibody - Additional Information

Gene ID 2776

Other Names

Guanine nucleotide-binding protein G(q) subunit alpha, Guanine nucleotide-binding protein alpha-q, GNAQ, GAQ

Calculated MW

42142 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Nucleus . Membrane . Nucleus membrane . Colocalizes with the adrenergic receptors, ADREN1A and ADREN1B, at the nuclear membrane of cardiac myocytes. .

Tissue Specificity

Predominantly expressed in ovary, prostate, testis and colon. Down-regulated in the peripheral blood lymphocytes (PBLs) of rheumatoid arthritis patients (at protein level). .

Protein Name

Guanine nucleotide-binding protein G(q) subunit alpha

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human GNAQ (102-138aa

KYEHNKAHAQLVREVDVEKVSFAFENPYVDAIKSLWND), identical to the related mouse and rat sequences.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-GNAQ Picoband Antibody - Protein Information

Name GNAQ

Synonyms GAQ

Function

Guanine nucleotide-binding proteins (G proteins) are involved as modulators or transducers in various transmembrane signaling systems. Required for platelet activation. Regulates B-cell selection and survival and is required to prevent B-cell-dependent autoimmunity. Regulates chemotaxis of BM-derived neutrophils and dendritic cells (in vitro) (By similarity). Transduces FFAR4 signaling in response to long-chain fatty acids (LCFAs) (PubMed: [27852822](http://www.uniprot.org/citations/27852822)). Together with GNA11, required for heart development (By similarity).

Cellular Location

Cell membrane; Lipid-anchor. Golgi apparatus. Nucleus {ECO:0000250|UniProtKB:P21279} Nucleus membrane {ECO:0000250|UniProtKB:P21279}. Note=Colocalizes with the adrenergic receptors, ADREN1A and ADREN1B, at the nuclear membrane of cardiac myocytes. {ECO:0000250|UniProtKB:P21279}

Tissue Location

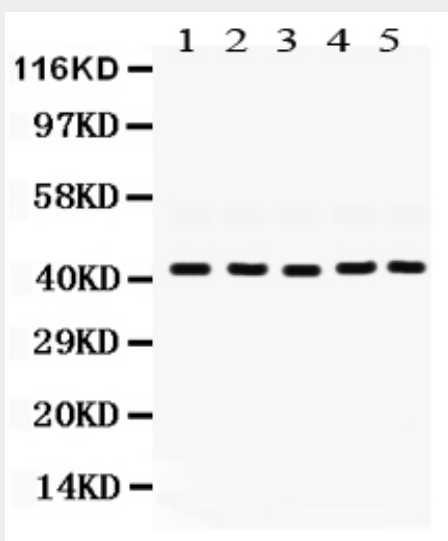
Predominantly expressed in ovary, prostate, testis and colon. Down-regulated in the peripheral blood lymphocytes (PBLs) of rheumatoid arthritis patients (at protein level)

Anti-GNAQ Picoband Antibody - Protocols

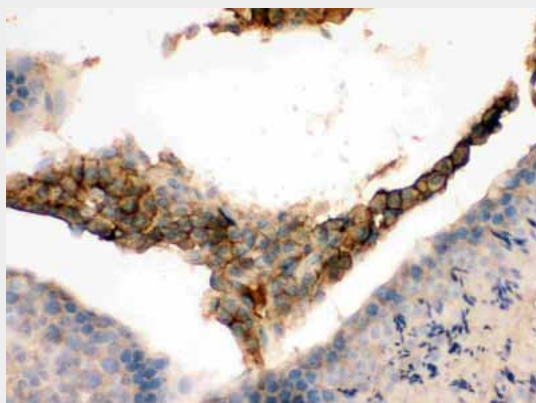
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

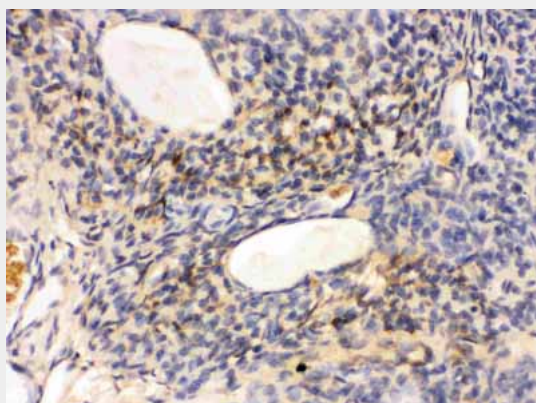
Anti-GNAQ Picoband Antibody - Images



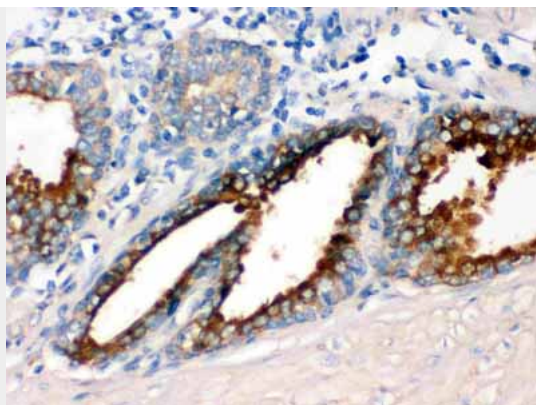
Anti- GNAQ Picoband antibody, ABO12393, Western blottingAll lanes: Anti GNAQ (ABO12393) at 0.5ug/mlLane 1: Rat Ovary Tissue Lysate at 50ugLane 2: Rat Testis Tissue Lysate at 50ugLane 3: Mouse Testis Tissue Lysate at 50ugLane 4: 22RV1 Whole Cell Lysate at 40ugLane 5: SKOV Whole Cell Lysate at 40ugPredicted bind size: 42KDObserved bind size: 42KD



Anti- GNAQ Picoband antibody, ABO12393, IHC(P)IHC(P): Mouse Testis Tissue



Anti- GNAQ Picoband antibody, ABO12393, IHC(P)IHC(P): Rat Ovary Tissue



Anti- GNAQ Picoband antibody, ABO12393, IHC(P)IHC(P): Human Prostatic Cancer Tissue

Anti-GNAQ Picoband Antibody - 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.