

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

**Specification**

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**Anti-GNAQ Picoband Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P50148</a>
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 Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>.

**Immunogen**

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

KYEHNKAAHAQLVREVDVEKVSFAFENPYVDAIKSLWND), 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

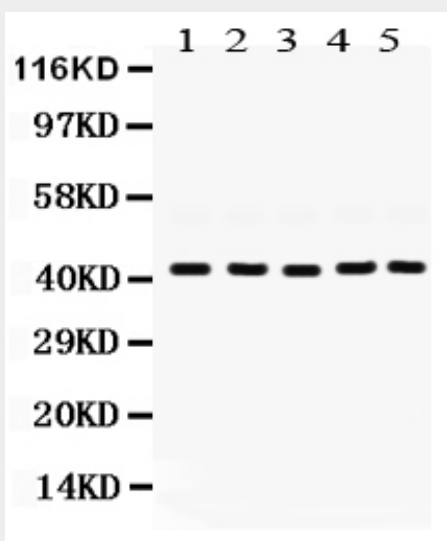
Predominantly expressed in ovary, prostate, testis and colon. Down-regulated in the peripheral blood lymphocytes (PBLs) of rheumatoid arthritis patients (at protein level)

### Anti-GNAQ Picoband Antibody - Protocols

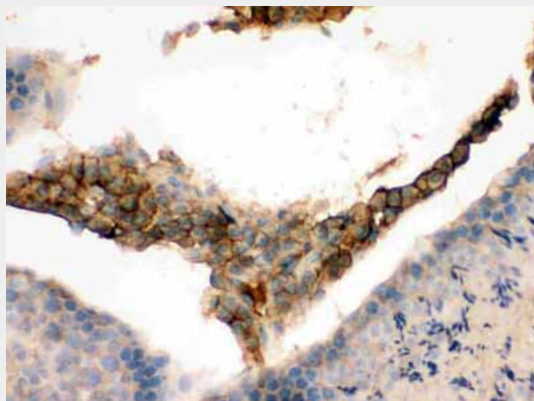
Provided below are standard protocols that you may find useful for product applications.

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

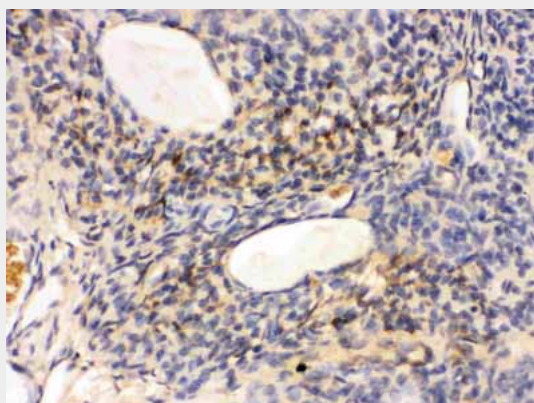
### Anti-GNAQ Picoband Antibody - Images



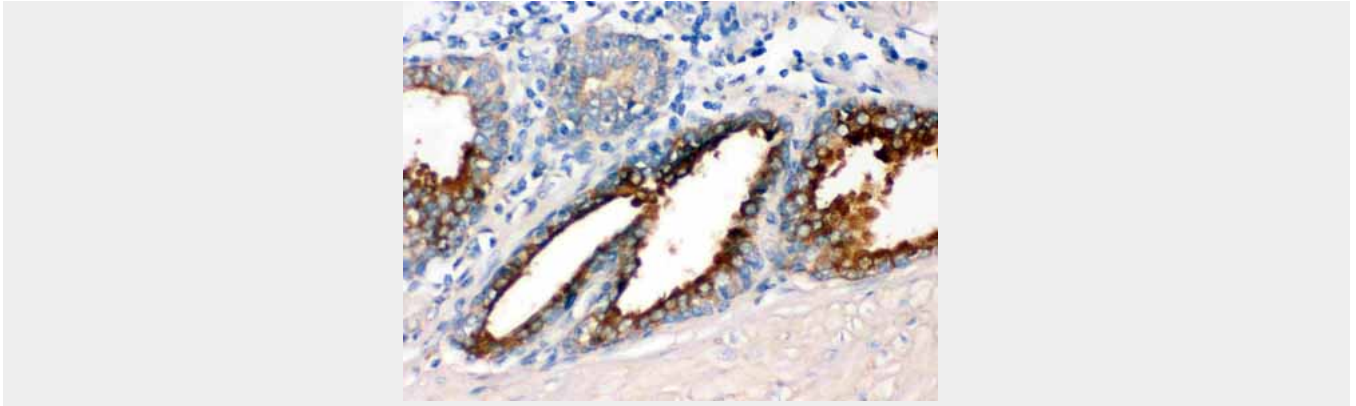
Anti- GNAQ Picoband antibody, ABO12393, Western blotting All lanes: Anti GNAQ (ABO12393) at 0.5ug/ml  
Lane 1: Rat Ovary Tissue Lysate at 50ug  
Lane 2: Rat Testis Tissue Lysate at 50ug  
Lane 3: Mouse Testis Tissue Lysate at 50ug  
Lane 4: 22RV1 Whole Cell Lysate at 40ug  
Lane 5: SKOV Whole Cell Lysate at 40ug  
Predicted bind size: 42KD  
Observed 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.