

Gnaq antibody - middle region

Rabbit Polyclonal Antibody

Catalog # AI13667

Product Information

Application	WB
Primary Accession	P82471
Other Accession	NM_031036 , NP_112298
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Chicken, Dog, Guinea Pig, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	42144

Additional Information

Gene ID	81666
Alias Symbol	Galphaq
Other Names	Guanine nucleotide-binding protein G(q) subunit alpha, Guanine nucleotide-binding protein alpha-q, Gnaq
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Gnaq antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	Gnaq antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Gnaq {ECO:0000312 RGD:620770}
Function	Guanine nucleotide-binding proteins (G proteins) function as transducers downstream of G protein-coupled receptors (GPCRs) in numerous signaling cascades. The alpha chain contains the guanine nucleotide binding site and alternates between an active, GTP-bound state and an inactive, GDP-bound state. Signaling by an activated GPCR promotes GDP release and GTP binding. The alpha subunit has a low GTPase activity that converts bound GTP to GDP, thereby terminating the signal. Both GDP release and GTP hydrolysis are modulated by numerous regulatory proteins. Signaling is mediated via phospholipase C-beta- dependent inositol lipid hydrolysis for signal

propagation: activates phospholipase C-beta: following GPCR activation, GNAQ activates PLC- beta (PLCB1, PLCB2, PLCB3 or PLCB4), leading to production of diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3). 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) (By similarity). Together with GNA11, required for heart development (By similarity).

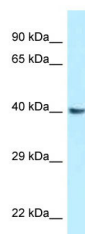
Cellular Location

Cell membrane {ECO:0000250|UniProtKB:P50148}; Peripheral membrane protein {ECO:0000250|UniProtKB:P50148}; Cytoplasmic side {ECO:0000250|UniProtKB:P50148}. Golgi apparatus {ECO:0000250|UniProtKB:P50148}. Nucleus {ECO:0000250|UniProtKB:P21279} Nucleus membrane {ECO:0000250|UniProtKB:P21279}. Note=Associated to the plasma membrane via lipid-anchor (By similarity). Colocalizes with the adrenergic receptors ADRA1A and ADRA1B at the nuclear membrane of cardiac myocytes (By similarity). {ECO:0000250|UniProtKB:P21279, ECO:0000250|UniProtKB:P50148}

References

Strotmann R.,et al.Submitted (FEB-2000) to the EMBL/GenBank/DDBJ databases.
Lesch K.-P.,et al.Biol. Psychiatry 32:549-579(1992).
Thomas C.P.,et al.Submitted (JAN-1995) to the EMBL/GenBank/DDBJ databases.

Images



WB Suggested Anti-Gnaq Antibody Titration: 1.0 µg/ml
Positive Control: Rat Brain

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.