

# GNAQ Rabbit mAb

Catalog # AP75508

## Product Information

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Application	WB, IHC-P, IP
Primary Accession	<a href="#">P50148</a>
Reactivity	Human, Rat
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	42142

## Additional Information

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Gene ID	2776
Other Names	GNAQ
Dilution	WB~~1/500-1/1000 IHC-P~~N/A IP~~N/A
Format	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

## Protein Information

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Name	GNAQ
Synonyms	GAQ
Function	<p>Guanine nucleotide-binding proteins (G proteins) function as transducers downstream of G protein-coupled receptors (GPCRs) in numerous signaling cascades (PubMed:<a href="#">37991948</a>). The alpha chain contains the guanine nucleotide binding site and alternates between an active, GTP-bound state and an inactive, GDP-bound state (PubMed:<a href="#">37991948</a>). Signaling by an activated GPCR promotes GDP release and GTP binding (PubMed:<a href="#">37991948</a>). The alpha subunit has a low GTPase activity that converts bound GTP to GDP, thereby terminating the signal (PubMed:<a href="#">37991948</a>). Both GDP release and GTP hydrolysis are modulated by numerous regulatory proteins (PubMed:<a href="#">37991948</a>). 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) (PubMed:<a href="#">37991948</a>). Required for platelet activation (By similarity). Regulates B-cell selection and survival and is required to prevent B-cell-dependent autoimmunity (By similarity). Regulates</p>

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](#)). Together with GNA11, required for heart development (By similarity).

### Cellular Location

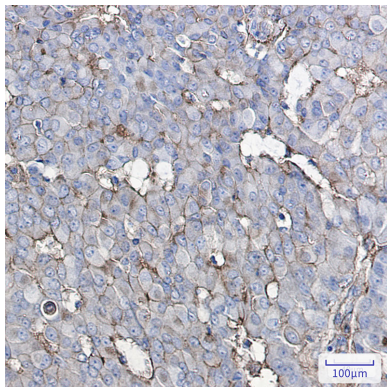
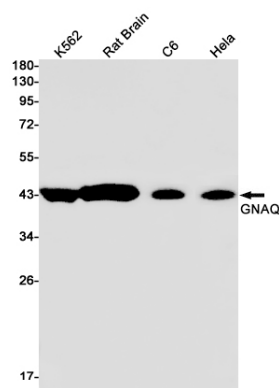
Cell membrane; Lipid-anchor. Golgi apparatus. Nucleus {ECO:0000250|UniProtKB:P21279} Nucleus membrane {ECO:0000250|UniProtKB:P21279}. Note=Colocalizes with the adrenergic receptors, ADREN1A and ADREN1B, at the nuclear membrane of cardiac myocytes. {ECO:0000250|UniProtKB:P21279}

### 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)

## Images

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