

GNA11 Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21291c**Specification**

GNA11 Antibody (Center) - Product Information

Application	WB, IF, E
Primary Accession	P29992
Reactivity	Human, Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG

GNA11 Antibody (Center) - Additional Information**Gene ID** 2767**Other Names**

Guanine nucleotide-binding protein subunit alpha-11, G alpha-11, G-protein subunit alpha-11, Guanine nucleotide-binding protein G(y) subunit alpha, GNA11, GA11

Target/Specificity

This GNA11 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 115-146 amino acids from the Central region of human GNA11.

Dilution

WB~~1:2000

IF~~1:25

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

GNA11 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

GNA11 Antibody (Center) - Protein Information**Name** GNA11**Synonyms** GA11

Function Guanine nucleotide-binding proteins (G proteins) function as transducers downstream of G protein-coupled receptors (GPCRs) in numerous signaling cascades (PubMed:[31073061](#)). The alpha chain contains the guanine nucleotide binding site and alternates between an active, GTP-bound state and an inactive, GDP-bound state (PubMed:[31073061](#)). Signaling by an activated GPCR promotes GDP release and GTP binding (PubMed:[31073061](#)). The alpha subunit has a low GTPase activity that converts bound GTP to GDP, thereby terminating the signal (PubMed:[31073061](#)). Both GDP release and GTP hydrolysis are modulated by numerous regulatory proteins (PubMed:[31073061](#)). Signaling is mediated via phospholipase C-beta-dependent inositol lipid hydrolysis for signal propagation: activates phospholipase C-beta: following GPCR activation, GNA11 activates PLC-beta (PLCB1, PLCB2, PLCB3 or PLCB4), leading to production of diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3) (PubMed:[31073061](#)). Transduces FFAR4 signaling in response to long-chain fatty acids (LCFAs) (PubMed:[27852822](#)). Together with GNAQ, required for heart development (By similarity). In the respiratory epithelium, transmits OXGR1-dependent signals that lead to downstream intracellular Ca(2+) release and mucocilliary clearance of airborne pathogens.

Cellular Location

Cell membrane; Lipid-anchor. Cytoplasm. Note=In testicular cells, expressed exclusively in the cytoplasm.

Tissue Location

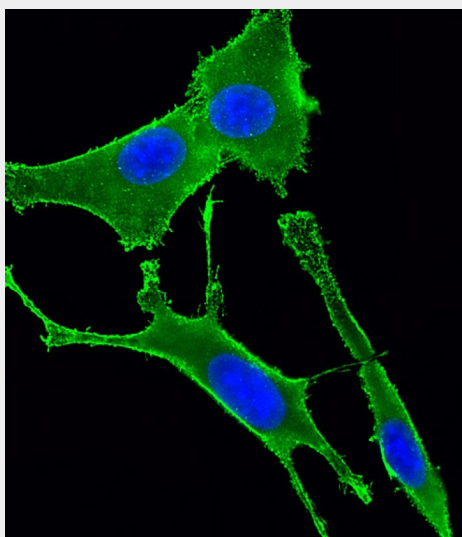
Expressed in testis..

GNA11 Antibody (Center) - Protocols

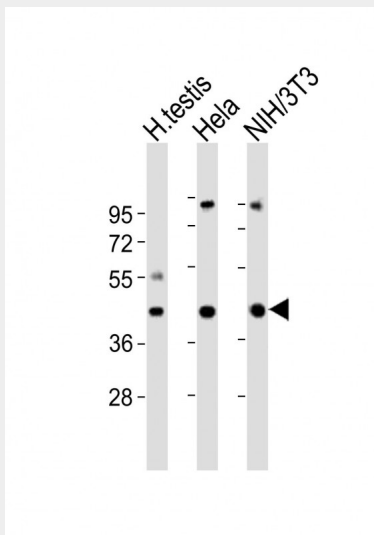
Provided below are standard protocols that you may find useful for product applications.

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

GNA11 Antibody (Center) - Images



Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized NIH/3T3 (mouse embryonic fibroblast cell line) cells labeling GNA11 with AP21291c at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (NK179883) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm and membrane staining on NIH/3T3 cell line. The nuclear counter stain is DAPI (blue).



All lanes : Anti-GNA11 Antibody (Center) at 1:2000 dilution Lane 1: human testis lysates Lane 2: Hela whole cell lysates Lane 3: NIH/3T3 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 36 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

GNA11 Antibody (Center) - Background

Guanine nucleotide-binding proteins (G proteins) are involved as modulators or transducers in various transmembrane signaling systems. Acts as an activator of phospholipase C.

GNA11 Antibody (Center) - References

Jiang M.,et al.Proc. Natl. Acad. Sci. U.S.A. 88:3907-3911(1991).
Bai X.H.,et al.Submitted (JUL-1997) to the EMBL/GenBank/DDBJ databases.
Puhl H.L. III,et al.Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases.
Ebert L.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
Grimwood J.,et al.Nature 428:529-535(2004).