

GNA13 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17044c

Specification

GNA13 Antibody (Center) - Product Information

Application WB,E
Primary Accession Q14344

Other Accession <u>Q6Q7Y5</u>, <u>P27601</u>, <u>NP_006563.2</u>

Reactivity
Predicted
Host
Clonality
Isotype
Calculated MW
Antigen Region

Human
Mouse, Rat
Rabbit
Polyclonal
Rabbit IgG
A4050
184-212

GNA13 Antibody (Center) - Additional Information

Gene ID 10672

Other Names

Guanine nucleotide-binding protein subunit alpha-13, G alpha-13, G-protein subunit alpha-13, GNA13

Target/Specificity

This GNA13 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 184-212 amino acids from the Central region of human GNA13.

Dilution

WB~~1:1000

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

GNA13 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

GNA13 Antibody (Center) - Protein Information

Name GNA13



Function Guanine nucleotide-binding proteins (G proteins) are involved as modulators or transducers in various transmembrane signaling systems (PubMed:15240885, PubMed:16705036, PubMed:16787920, PubMed:27084452). Activates effector molecule RhoA by binding and activating RhoGEFs (ARHGEF1/p115RhoGEF, ARHGEF11/PDZ-RhoGEF and ARHGEF12/LARG) (PubMed:12515866, PubMed:15240885). GNA13-dependent Rho signaling subsequently regulates transcription factor AP-1 (activating protein-1) (By similarity). Promotes tumor cell invasion and metastasis by activating RhoA/ROCK signaling pathway (PubMed:16705036, PubMed:16787920, PubMed:27084452). Inhibits CDH1-mediated cell adhesion in a process independent from Rho activation (PubMed:11976333). In lymphoid follicles, transmits P2RY8- and S1PR2-dependent signals that lead to inhibition of germinal center (GC) B cell growth and migration outside the GC niche.

Cellular Location

Cell membrane; Lipid-anchor. Melanosome. Cytoplasm. Nucleus Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV (PubMed:17081065). Detected in the cytoplasm of Leydig cells and in the seminiferous epithelium, including differentiating cells from the spermatogonia to mature spermatozoa stages (PubMed:18703424). In round spermatids, also present in the nuclei (PubMed:18703424).

Tissue Location

Expressed in testis, including in Leydig cells and in the seminiferous epithelium, in differentiating cells from the spermatogonia to mature spermatozoa stages and round spermatids (at protein level). Expressed in 99.2% of spermatozoa from healthy individuals, but only in 28.6% of macrocephalic spermatozoa from infertile patients (at protein level).

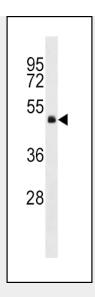
GNA13 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GNA13 Antibody (Center) - Images





GNA13 Antibody (Center) (Cat. #AP17044c) western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the GNA13 antibody detected the GNA13 protein (arrow).

GNA13 Antibody (Center) - Background

Guanine nucleotide-binding proteins (G proteins) are involved as modulators or transducers in various transmembrane signaling systems.

GNA13 Antibody (Center) - References

Rose, J. Phd, et al. Mol. Med. (2010) In press: Grzelinski, M., et al. Clin. Cancer Res. 16(5):1402-1415(2010) Gong, H., et al. Science 327(5963):340-343(2010) Saito, M., et al. Cell. Signal. 22(1):41-46(2010) Chen, L., et al. J. Biol. Chem. 284(40):27409-27415(2009)