

GNA13 Antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # AI15332

Product Information

Application WB Primary Accession Q14344

Other Accession <u>NM 006572</u>, <u>NP 006563</u>

Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 44050

Additional Information

Gene ID 10672

Alias Symbol G13, MGC46138

Other Names Guanine nucleotide-binding protein subunit alpha-13, G alpha-13, G-protein

subunit alpha-13, GNA13

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-GNA13 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 GNA13 Antibody - N-terminal region is for research use only and not for use

in diagnostic or therapeutic procedures.

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:<u>16787920</u>, PubMed:<u>27084452</u>). Inhibits CDH1-mediated cell adhesion in a process independent from Rho activation (PubMed:<u>11976333</u>).

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).

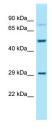
Tissue Location

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).

References

Kabouridis P.S., et al. Mol. Cell. Biochem. 144:45-51(1995). Puhl H.L. III, et al. Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases. Ota T., et al. Nat. Genet. 36:40-45(2004). Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Bhattacharyya R., et al. J. Biol. Chem. 275:14992-14999(2000).

Images



WB Suggested Anti-GNA13 Antibody Titration: 1.0 μg/ml Positive Control: 721_B Whole CellGNA13 is supported by BioGPS gene expression data to be expressed in 721_B

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