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GNA13 Antibody

Rabbit mAb
Catalog # AP92904

Product Information

Application	WB, IHC
Primary Accession	Q14344
Reactivity	Human
Clonality	Monoclonal
Other Names	G alpha 13; GNA13;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	44050

Additional Information

Dilution	WB 1:500~1:2000 IHC 1:50~1:200
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human GNA13
Description	Guanine nucleotide-binding proteins (G proteins) are involved as modulators or transducers in various transmembrane signaling systems.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

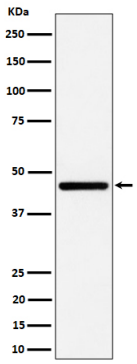
Name	GNA13
Function	Guanine nucleotide-binding proteins (G proteins) are involved as modulators or transducers in various transmembrane signaling systems (PubMed:15240885, PubMed:16705036, PubMed:16787920, PubMed:27084452). Activates effector molecule RhoA by binding and activating RhoGEFs (ARHGEF1/p115RhoGEF, 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; Peripheral membrane protein; Cytoplasmic side. Melanosome. Cytoplasm Nucleus. Note=Associated to the plasma membrane

via lipid-anchor (PubMed:10747909). 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).

Images



Western blot analysis of GNA13 expression in HepG2 cell lysate.

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