

Anti-GNA13 antibody



Description	Unconjugated Rabbit polyclonal to GNA13
Model	STJ190857
Host	Rabbit
Reactivity	Human, Mouse
Applications	ELISA, WB
Gene ID	10672
Gene Symbol	GNA13
Dilution range	WB 1:500-2000 ELISA 1:5000-20000
Specificity	GNA13 Polyclonal Antibody detects endogenous levels of protein.
Tissue Specificity	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).
Purification	GNA13 antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Guanine nucleotide-binding protein subunit alpha-13 G alpha-13 G-protein subunit alpha-13
Molecular Weight	41 kDa
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:4381 OMIM:604406
Alternative Names	Guanine nucleotide-binding protein subunit alpha-13 G alpha-13 G-protein subunit alpha-13
Function	Guanine nucleotide-binding proteins (G proteins) are involved as modulators or transducers in various transmembrane signaling systems . Activates effector molecule RhoA by binding and activating RhoGEFs (ARHGEF1/p115RhoGEF, ARHGEF11/PDZ-RhoGEF and ARHGEF12/LARG) . GNA13-dependent Rho signaling subsequently regulates transcription factor AP-1 (activating protein-1) . Promotes tumor cell invasion and metastasis by activating RhoA/ROCK signaling pathway . Inhibits CDH1-mediated cell adhesion in process independent from Rho activation .
Cellular Localization	Cell membrane Melanosome Cytoplasm Nucleus. Identified by mass spectrometry in melanosome fractions from stage I to stage IV . Detected in the cytoplasm of Leydig cells and in the seminiferous epithelium, including differentiating cells from the spermatogonia to mature spermatozoa stages . In round spermatids, also present in the nuclei .
Post-translational Modifications	Palmitoylation is critical for proper membrane localization and signaling. Phosphorylation on Thr-203 by PKA destabilizes the heterotrimer of alpha, beta and gamma, and inhibits Rho activation.