



Gα t1 Polyclonal Antibody

Catalog No	YP-Ab-16174
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;ELISA
Gene Name	GNAT1
Protein Name	Guanine nucleotide-binding protein G(t) subunit alpha-1
Immunogen	The antiserum was produced against synthesized peptide derived from human GNAT1. AA range:71-120
Specificity	Gα t1 Polyclonal Antibody detects endogenous levels of Gα t1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	GNAT1; GNATR; Guanine nucleotide-binding protein G(t) subunit alpha-1; Transducin alpha-1 chain
Observed Band	36kD
Cell Pathway	Cell projection, cilium, photoreceptor outer segment . Membrane ; Peripheral membrane protein . Photoreceptor inner segment . Localizes mainly in the outer segment in the dark-adapted state, whereas is translocated to the inner part of the photoreceptors in the light-adapted state. During dark-adapted conditions, in the presence of UNC119 mislocalizes from the outer segment to the inner part of rod photoreceptors which leads to decreased photoreceptor damage caused by light.
Tissue Specificity	Rod photoreceptor cells (PubMed:1614872). Predominantly expressed in the retina followed by the ciliary body, iris and retinal pigment epithelium (PubMed:22190596).
Function	disease:Defects in GNAT1 are the cause of congenital stationary night blindness autosomal dominant type 3 (CSNBAD3) [MIM:610444]; also known as congenital stationary night blindness Nougaret type. Congenital stationary night blindness is a non-progressive retinal disorder characterized by impaired night vision.,function:Guanine nucleotide-binding proteins (G proteins) are involved as modulators or transducers in various transmembrane signaling systems. Transducin is an amplifier and one of the transducers of a visual impulse that performs the coupling between rhodopsin and cGMP-phosphodiesterase.,online



information:Retina International's Scientific Newsletter,similarity:Belongs to the G-alpha family. G(i/o/t/z) subfamily.,subunit:G proteins are composed of 3 units; alpha, beta and gamma. The alpha chain contains the guanine nucleotide binding site.,tissue specificity:Rod.,

Background

Transducin is a 3-subunit guanine nucleotide-binding protein (G protein) which stimulates the coupling of rhodopsin and cGMP-phosphodiesterase during visual impulses. The transducin alpha subunits in rods and cones are encoded by separate genes. This gene encodes the alpha subunit in rods. This gene is also expressed in other cells, and has been implicated in bitter taste transduction in rat taste cells. Mutations in this gene result in autosomal dominant congenital stationary night blindness. Multiple alternatively spliced variants, encoding the same protein, have been identified. [provided by RefSeq, Feb 2009],

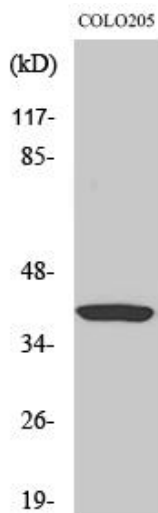
matters needing attention

Avoid repeated freezing and thawing!

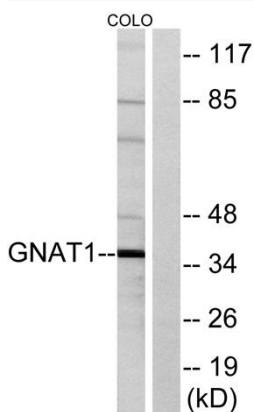
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using Gα t1 Polyclonal Antibody diluted at 1:2000



Western blot analysis of lysates from COLO cells, using GNAT1 Antibody. The lane on the right is blocked with the synthesized peptide.