10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Gα t1 Polyclonal Antibody

Catalog # AP70277

Product Information

Application	WB
Primary Accession	P11488
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	40041

Additional Information

Gene ID	2779
Other Names	GNAT1; GNATR; Guanine nucleotide-binding protein G(t) subunit alpha-1; Transducin alpha-1 chain
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications.
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

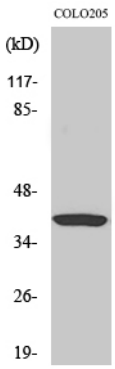
Name	GNAT1
Synonyms	GNATR
Function	Functions as a signal transducer for the rod photoreceptor RHO. Required for normal RHO-mediated light perception by the retina (PubMed:22190596). Guanine nucleotide-binding proteins (G proteins) function as transducers downstream of G protein-coupled receptors (GPCRs), such as the photoreceptor RHO. The alpha chain contains the guanine nucleotide binding site and alternates between an active, GTP- bound state and an inactive, GDP-bound state. Activated RHO promotes GDP release and GTP binding. Signaling is mediated via downstream effector proteins, such as cGMP-phosphodiesterase (By similarity).
Cellular Location	Cell projection, cilium, photoreceptor outer segment {ECO:0000250|UniProtKB:P04695}. Membrane {ECO:0000250|UniProtKB:P04695}; Peripheral membrane protein {ECO:0000250|UniProtKB:P04695}. Photoreceptor inner segment {ECO:0000250|UniProtKB:P20612}. Note=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 {ECO:0000250|UniProtKB:P20612}
Tissue Location	Rod photoreceptor cells (PubMed:1614872). Predominantly expressed in the retina followed by the ciliary body, iris and retinal pigment epithelium (PubMed:22190596)

Background

Functions as signal transducer for the rod photoreceptor RHO. Required for normal RHO-mediated light perception by the retina (PubMed:22190596). Guanine nucleotide-binding proteins (G proteins) function as transducers downstream of G protein-coupled receptors (GPCRs), such as the photoreceptor RHO. The alpha chain contains the guanine nucleotide binding site and alternates between an active, GTP-bound state and an inactive, GDP-bound state. Activated RHO promotes GDP release and GTP binding. Signaling is mediated via downstream effector proteins, such as cGMP-phosphodiesterase (By similarity).

Images



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