

Ga t1 Polyclonal Antibody

Catalog # AP70277

## Specification

# Gα t1 Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality WB <u>P11488</u> Human, Mouse, Rat Rabbit Polyclonal

## Ga t1 Polyclonal Antibody - 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°C

## Ga t1 Polyclonal Antibody - 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:<a

href="http://www.uniprot.org/citations/22190596" target="\_blank">22190596</a>). 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)

## Ga t1 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### Ga t1 Polyclonal Antibody - Images







# Ga t1 Polyclonal Antibody - 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).