

Anti-GNAT1 Antibody
Rabbit polyclonal antibody to GNAT1
Catalog # AP60296**Specification**

Anti-GNAT1 Antibody - Product Information

Application	WB, IH
Primary Accession	P11488
Other Accession	P20612
Reactivity	Human, Mouse, Rat, Bovine, Drosophila
Host	Rabbit
Clonality	Polyclonal
Calculated MW	40041

Anti-GNAT1 Antibody - Additional Information**Gene ID** 2779**Other Names**

GNATR; Guanine nucleotide-binding protein G(t) subunit alpha-1; Transducin alpha-1 chain

Target/Specificity

Recognizes endogenous levels of GNAT1 protein.

Dilution

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200)

IH~~WB (1/500 - 1/1000), IH (1/100 - 1/200)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-GNAT1 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: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

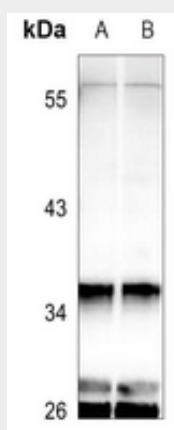
Rod photoreceptor cells (PubMed:1614872). Predominantly expressed in the retina followed by the ciliary body, iris and retinal pigment epithelium (PubMed:22190596)

Anti-GNAT1 Antibody - Protocols

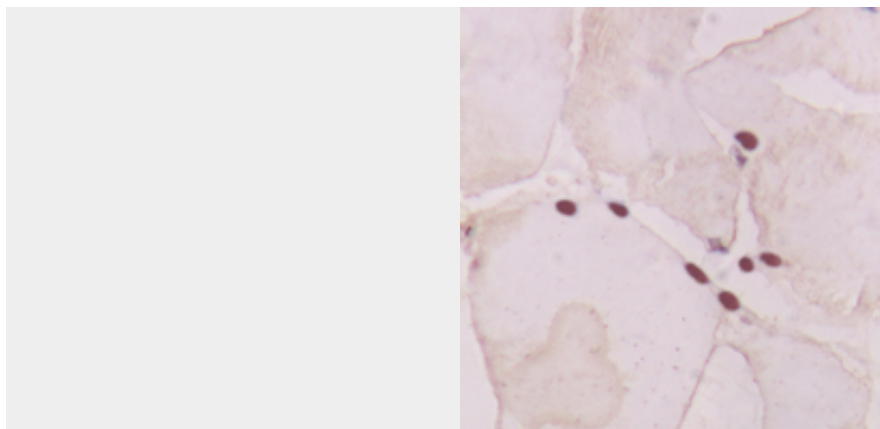
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-GNAT1 Antibody - Images



Western blot analysis of GNAT1 expression in mouse eyes (A), rat eyes (B) whole cell lysates.



Immunohistochemical analysis of GNAT1 staining in human heart formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Anti-GNAT1 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human GNAT1. The exact sequence is proprietary.