

## GNAT1 Polyclonal antibody

Catalog Number: 55167-1-AP

9 Publications

## Basic Information

<b>Catalog Number:</b> 55167-1-AP	<b>GenBank Accession Number:</b> NM_000172	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 400 µg/ml by Nanodrop and 233 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 2779	<b>Recommended Dilutions:</b> WB 1:2000-1:10000 IHC 1:750-1:3000 IF 1:50-1:500
<b>Source:</b> Rabbit	<b>Full Name:</b> guanine nucleotide binding protein (G protein), alpha transducing activity polypeptide 1	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 40 kDa	
	<b>Observed MW:</b> 35-40 kDa	

## Applications

**Tested Applications:**  
FC, IF, IHC, WB, ELISA

**Cited Applications:**  
IF, IHC, WB

**Species Specificity:**  
human, mouse, rat

**Cited Species:**  
mouse, zebrafish

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB :** mouse retina tissue, mouse eye tissue, rat retina tissue

**IHC :** mouse eye tissue,

**IF :** HeLa cells,

## Background Information

GNAT1, also named as GNATR, belongs to the G-alpha family and G(i/o/t/z) subfamily. 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. Defects in GNAT1 are the cause of congenital stationary night blindness autosomal dominant type 3 (CSNBAD3). This antibody is specific to GNAT1.

## Notable Publications

Author	Pubmed ID	Journal	Application
Christie K Campla	36180221	eNeuro	IHC
Juan M Angueyra	30283779	Front Cell Dev Biol	
Jie Zhang	34805789	iScience	WB

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

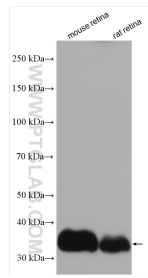
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

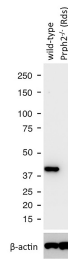
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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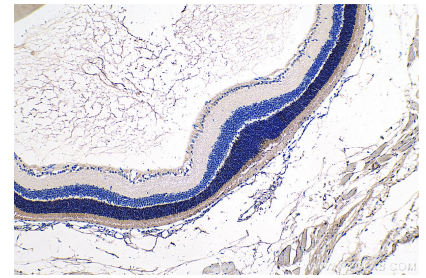
## Selected Validation Data



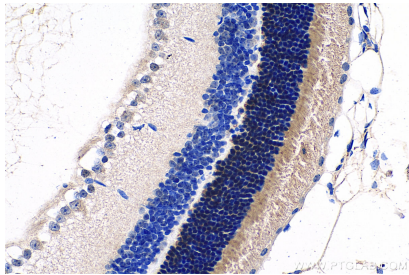
Various lysates were subjected to SDS PAGE followed by western blot with 55167-1-AP (GNAT1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



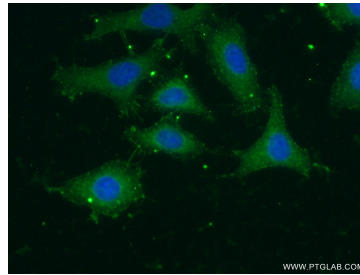
WB results of GNAT1 antibody (55167-1-AP) with WT mouse Eye and Prph2 (Rds) mutant mouse Eye (Negative control). Courtesy of Seongjin Seo, PhD, University of Iowa College of Medicine.



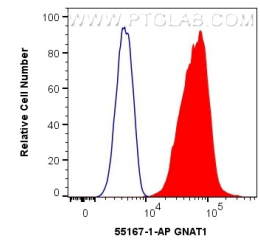
Immunohistochemical analysis of paraffin-embedded mouse eye tissue slide using 55167-1-AP (GNAT1 antibody) at dilution of 1:1500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse eye tissue slide using 55167-1-AP (GNAT1 antibody) at dilution of 1:1500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using 55167-1-AP (GNAT1 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human GNAT1 (55167-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).