

For Research Use Only

# GNAT1 Polyclonal antibody

Catalog Number: 55167-1-AP

11 Publications



## Basic Information

### Catalog Number:

55167-1-AP

### Size:

150ul, Concentration: 400 ug/ml by Nanodrop and 233 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### GenBank Accession Number:

NM\_000172

### GeneID (NCBI):

2779

### UNIPROT ID:

P11488

### Full Name:

guanine nucleotide binding protein (G protein), alpha transducing activity polypeptide 1

### Calculated MW:

40 kDa

### Observed MW:

35-40 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:10000

IHC 1:750-1:3000

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

### Cited Applications:

WB, IHC, IF

### 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/ICC : 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, pH7.3

Aliquoting is unnecessary for -20°C storage

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

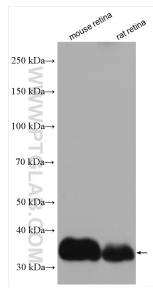
For technical support and original validation data for this product please contact:

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

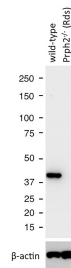
E: proteintech@ptglab.com  
W: ptglab.com

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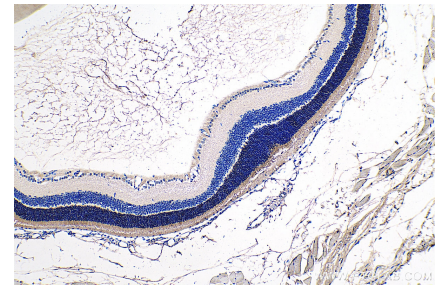
## Selected Validation Data



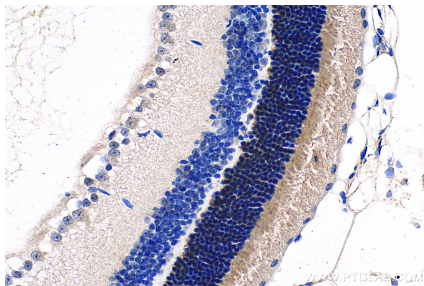
Various lysates were subjected to SDS PAGE followed by western blot with 55167-1-AP (GNAT1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



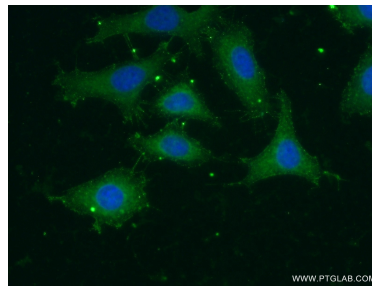
WB results of GNAT1 antibody (55167-1-AP) with WT mouse Eye and Prph2 (Rds) mutant mouse Eye (Negative control). Courtesy of Seongjin Seo, PhD, University of Iowa College of Medicine.



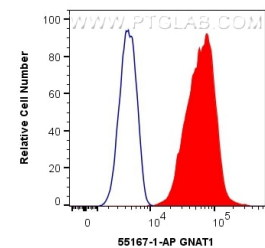
Immunohistochemical analysis of paraffin-embedded mouse eye tissue slide using 55167-1-AP (GNAT1 antibody) at dilution of 1:1500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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 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 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).