

GNAT2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11077C

Product Information

Application WB, IHC-P, E
Primary Accession P19087
Other Accession NP_005263.1
Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Clone Names RB30047
Calculated MW 40176
Antigen Region 140-169

Additional Information

Gene ID 2780

Other Names Guanine nucleotide-binding protein G(t) subunit alpha-2, Transducin alpha-2

chain, GNAT2, GNATC

Target/SpecificityThis GNAT2 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 140-169 amino acids from the Central

region of human GNAT2.

Dilution WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions GNAT2 Antibody (Center) is for research use only and not for use in diagnostic

or therapeutic procedures.

Protein Information

Name GNAT2

Synonyms GNATC

Function 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.

Cellular Location

Cell projection, cilium, photoreceptor outer segment {ECO:0000250 | UniProtKB:P50149}. Photoreceptor inner segment {ECO:0000250 | UniProtKB:P50149}. 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:P50149}

Tissue Location

Retinal rod outer segment.

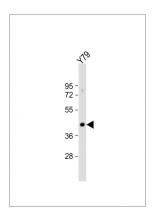
Background

Transducin is a 3-subunit guanine nucleotide-binding protein (G protein) which stimulates the coupling of rhodopsin and cGMP-phoshodiesterase during visual impulses. The transducin alpha subunits in rods and cones are encoded by separate genes. This gene encodes the alpha subunit in cones.

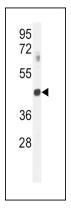
References

Shi, J., et al. Mol. Psychiatry (2010) In press: Thiadens, A.A., et al. Ophthalmology 116(10):1984-1989(2009) Luttrell, L.M. Mol. Biotechnol. 39(3):239-264(2008) Oldham, W.M., et al. Nat. Struct. Mol. Biol. 13(9):772-777(2006) Rosenberg, T., et al. Invest. Ophthalmol. Vis. Sci. 45(12):4256-4262(2004)

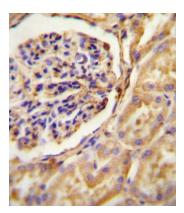
Images



Anti-GNAT2 Antibody (Center) at 1:1000 dilution + Y79 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 40 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



GNAT2 Antibody (Center) (Cat. #AP11077c) western blot analysis in mouse spleen tissue lysates (35ug/lane). This demonstrates the GNAT2 antibody detected the GNAT2 protein (arrow).



GNAT2 antibody (Center) (Cat. #AP11077c) immunohistochemistry analysis in formalin fixed and paraffin embedded human Kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the GNAT2 antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

Citations

• <u>Caffeine induces gastric acid secretion via bitter taste signaling in gastric parietal cells.</u>

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.