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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
Predicted	Rat, Bovine, Canine, Rabbit, Chicken
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/Specificity	This 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 (HGNC:4394)
Synonyms	GNATC

Function	Alpha subunit of the heterotrimeric guanine nucleotide- binding protein (G protein) that transduces signals from the G protein- coupled cone photoreceptors (blue, green and red cones) (PubMed:12077706, PubMed:2534964). Functions as a GTPase, cycling between an active GTP-bound state and an inactive GDP-bound state. Upon photoactivation, cone photoreceptors promote GDP release and GTP binding (By similarity). In its active state, GNAT2 stimulates downstream effectors, including the cone cGMP-phosphodiesterase (PDE6) complex, to mediate the phototransduction cascade (By similarity). Activation of the PDE6 complex occurs through binding and repositioning of the inhibitory PDE6 gamma subunits (PDE6H), thereby promoting catalytic activity (By similarity).
Cellular Location	Cell projection, cilium, photoreceptor outer segment. Photoreceptor inner segment
Tissue Location	Retinal cone photoreceptors.

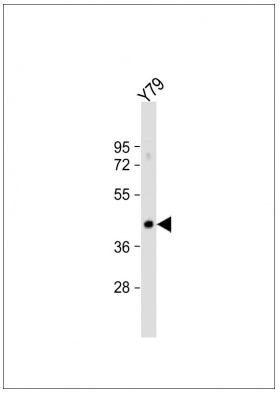
Background

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

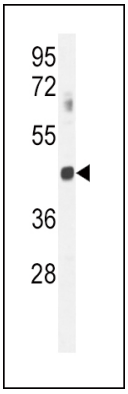
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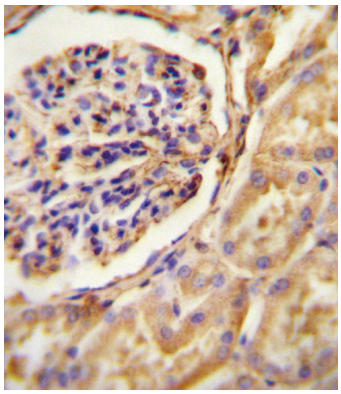
Images



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

- Caffeine induces gastric acid secretion via bitter taste signaling in gastric parietal cells.

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