

Rabbit GNAT1 Polyclonal Antibody | anti-GNAT1 antibody

GNAT1 Antibody (C-term)

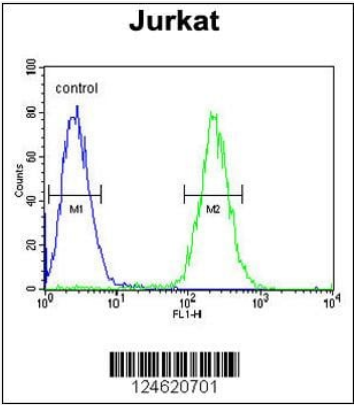
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA284250	Rabbit	Human (Predicted Reactivity: Mouse, Xenopus)	ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

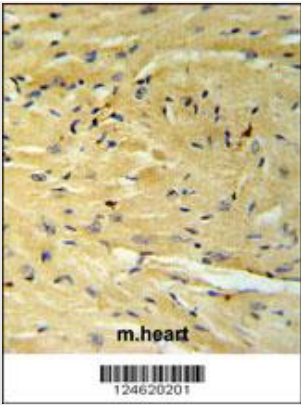
GNAT1; Polyclonal Antibody; GNAT1 Antibody (C-term); Guanine nucleotide-binding protein G(t) subunit alpha-1; Transducin alpha-1 chain; GNATR; anti-GNAT1 antibody

PRODUCT SPECIFICATIONS

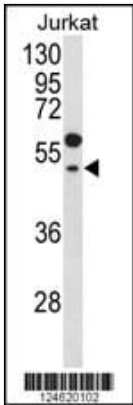
Host	Rabbit
Reactivity	Human (Predicted Reactivity: Mouse, Xenopus)
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This GNAT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 290-318 amino acids from the C-terminal region of human GNAT1.
Purity/Purification	Peptide Affinity Purified Rabbit Polyclonal Antibody (Pab)
Form/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.
Sequence Positions	290-318
Sequence Length	350
Applicable Applications for anti-GNAT1 antibody	ELISA, FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Function	Functions as signal transducer for the rod photoreceptor RHO. Required for normal RHO-mediated light perception by the retina (PubMed:). 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}
Tissue Location	Rod photoreceptor cells (PubMed:1614872). Predominantly expressed in the retina followed by the ciliary body, iris and retinal pigment epithelium (PubMed:22190596)
Preparation and 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.



FCM/FACS (Flow Cytometry)
GNAT1 Antibody (C-term) flow cytometric analysis of Jurkat cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



IHC (Immunohistochemistry)
GNAT1 Antibody (C-term) IHC analysis in formalin fixed and paraffin embedded mouse heart tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the GNAT1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



WB (Western Blot)
Western blot analysis of GNAT1 Antibody (C-term) in Jurkat cell line lysates (35ug/lane). GNAT1 (arrow) was detected using the purified Pab.

ADDITIONAL INFORMATION

Related Product Information for anti-GNAT1 antibody	Transducin is a 3-subunit guanine nucleotide-binding protein (G protein) which stimulates the coupling of rhodopsin and cGMP-phosphodiesterase during visual impulses. The transducin alpha subunits in rods and cones are encoded by separate genes. This gene encodes the alpha subunit in rods. This gene is also expressed in other cells, and has been implicated in bitter taste transduction in rat taste cells.
Product Categories/Family for anti-GNAT1 antibody	Neuroscience; Signal Transduction
References	Luttrell, L.M. Mol. Biotechnol. 39(3):239-264(2008) Szabo, V., et al. Hum. Mutat. 28(7):741-742(2007) Yi, H.M., et al. Ai Zheng 26(1):9-14(2007) Oldham, W.M., et al. Nat. Struct. Mol. Biol. 13(9):772-777(2006) Muzny, D.M., et al. Nature 440(7088):1194-1198(2006)

NCBI AND UNIPROT INFORMATION

NCBI GI #	22027520
NCBI GeneID	2779
NCBI Accession #	NP_000163.2 ; NP_653082.1
NCBI GenBank Nucleotide #	NM_000172.3

UniProt Accession #	P11488; Q4VBN2
NCBI Official Full Name	guanine nucleotide-binding protein G(t) subunit alpha-1
NCBI Official Synonym Full Names	guanine nucleotide binding protein (G protein), alpha transducing activity polypeptide 1
NCBI Official Symbol	GNAT1
NCBI Official Synonym Symbols	GBT1; GNATR; CSNB1G; CSNBAD3
NCBI Protein Information	guanine nucleotide-binding protein G(t) subunit alpha-1
UniProt Protein Name	Guanine nucleotide-binding protein G(t) subunit alpha-1
UniProt Gene Name	GNAT1
UniProt Synonym Gene Names	GNATR
UniProt Entry Name	GNAT1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/gnat1-antibody-flow-cytometry-immunohistochemistry-western-blot-elisa/284250>