

GNAT1 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP9783b**Specification**

GNAT1 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [P11488](#)**GNAT1 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 2779**Other Names**

Guanine nucleotide-binding protein G(t) subunit alpha-1, Transducin alpha-1 chain, GNAT1, GNATR

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GNAT1 Antibody (C-term) Blocking Peptide - Protein Information**Name** GNAT1**Synonyms** GNATR**Function**

Functions as a signal transducer for the rod photoreceptor RHO. Required for normal RHO-mediated light perception by the retina (PubMed:22190596). 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}. Photoreceptor inner segment {ECO:0000250|UniProtKB:P20612}. 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:P20612}

Tissue Location

Rod photoreceptor cells (PubMed:1614872). Predominantly expressed in the retina followed by the ciliary body, iris and retinal pigment epithelium (PubMed:22190596)

GNAT1 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

GNAT1 Antibody (C-term) Blocking Peptide - Images**GNAT1 Antibody (C-term) Blocking Peptide - Background**

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.

GNAT1 Antibody (C-term) Blocking Peptide - 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)