

AANAT Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP9626a

Specification

AANAT Antibody (N-term) Blocking Peptide - Product Information

Primary Accession [O16613](#)

AANAT Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 15

Other Names

Serotonin N-acetyltransferase, Serotonin acetylase, Aralkylamine N-acetyltransferase, AA-NAT, AANAT, SNAT

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.

AANAT Antibody (N-term) Blocking Peptide - Protein Information

Name AANAT

Synonyms SNAT

Function

Controls the night/day rhythm of melatonin production in the pineal gland. Catalyzes the N-acetylation of serotonin into N-acetylserotonin, the penultimate step in the synthesis of melatonin.

Cellular Location

Cytoplasm.

Tissue Location

Highly expressed in pineal gland and at lower levels in the retina. Weak expression in several brain regions and in the pituitary gland.

AANAT Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

AANAT Antibody (N-term) Blocking Peptide - Images

AANAT Antibody (N-term) Blocking Peptide - Background

AANAT belongs to the acetyltransferase superfamily. It is the penultimate enzyme in melatonin synthesis and controls the night/day rhythm in melatonin production in the vertebrate pineal gland. Melatonin is essential for the function of the circadian clock that influences activity and sleep. This enzyme is regulated by cAMP-dependent phosphorylation that promotes its interaction with 14-3-3 proteins and thus protects the enzyme against proteasomal degradation. This gene may contribute to numerous genetic diseases such as delayed sleep phase syndrome.

AANAT Antibody (N-term) Blocking Peptide - References

Mansour, H.A., et al. Bipolar Disord 11(7):701-710(2009) Gratacos, M., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 150B (6), 808-816 (2009) Anderson, B.M., et al. Neurogenetics 10(3):209-216(2009)