

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

**Specification**

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**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)