

**AANAT Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP9626a****Specification**

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**AANAT Antibody (N-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q16613</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	23344
Antigen Region	27-54

**AANAT Antibody (N-term) - Additional Information****Gene ID** 15**Other Names**

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

**Target/Specificity**

This AANAT antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 27-54 amino acids from the N-terminal region of human AANAT.

**Dilution**

WB~~1:2000

**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**

AANAT Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**AANAT Antibody (N-term) - 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.

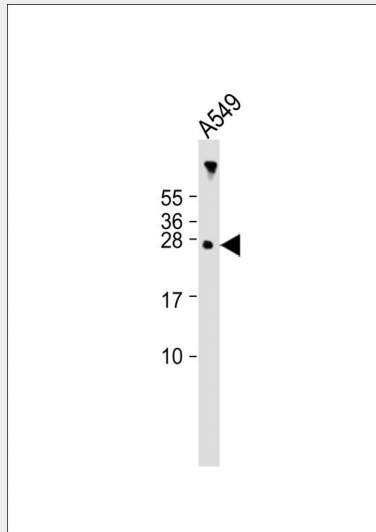
**Tissue Location**  
Highly expressed in pineal gland and at lower levels in the retina. Weak expression in several brain regions and in the pituitary gland.

### **AANAT Antibody (N-term) - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **AANAT Antibody (N-term) - Images**



Anti-AANAT Antibody (N-term) at 1:2000 dilution + A549 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 : 23 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

### **AANAT Antibody (N-term) - 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) - 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)