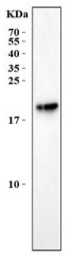
Aanat Antibody (RQ6914)

Catalog No.	Formulation	Size
RQ6914	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Mouse
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	O88816
Applications	Western Blot : 0.5-1 ug/ml Direct ELISA : 0.1-0.5ug/ml
Limitations	This Aanat antibody is available for research use only.



Western blot testing of mouse eye lysate with Aanat antibody. Predicted molecular weight ~23 kDa.

Description

Aralkylamine N-acetyltransferase (AANAT) (EC 2.3.1.87), also known as arylalkylamine N-acetyltransferase or serotonin N-acetyltransferase (SNAT), is an enzyme that is involved in the day/night rhythmic production of melatonin, by modification of serotonin. It is in humans encoded by the ~2.5 kb AANAT gene containing four exons, located on chromosome 17q25. The protein encoded by this gene 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. Alternative splicing results in multiple transcript variants.

Application Notes

Optimal dilution of the Aanat antibody should be determined by the researcher.

Immunogen

Recombinant mouse Aanat protein (amino acids C24-C205) was used as the immunogen for the Aanat antibody.

Storage

After reconstitution, the Aanat antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.