

Product datasheet for **TL50005V**

Aanat Mouse shRNA Lentiviral Particle (Locus ID 11298)

Product data:

Product Type:	shRNA Lentiviral Particles
Product Name:	Aanat Mouse shRNA Lentiviral Particle (Locus ID 11298)
Locus ID:	11298
Synonyms:	AA-NAT; Na; Nat; Nat-2; Nat4; S; Snat
Vector:	pGFP-C-shLenti (TR30023)
Format:	Lentiviral particles
Components:	Aanat - Mouse shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble control), 0.5 ml each, >10 ⁷ TU/ml.
RefSeq:	BC116967 , BC119139 , NM_009591 , NR_033223 , NM_009591.1 , NM_009591.2 , NM_009591.3
UniProt ID:	O88816
Summary:	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. [provided by RefSeq, Jan 2010]
shRNA Design:	These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com . If you need a special design or shRNA sequence, please utilize our custom shRNA service .



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**Performance
Guaranteed:**

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).