

## Product datasheet for RC210142L3V

## OriGene Technologies, Inc.

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## Serotonin N acetyltransferase (AANAT) (NM\_001088) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

**Product Name:** Serotonin N acetyltransferase (AANAT) (NM\_001088) Human Tagged ORF Clone Lentiviral

Particle

**Symbol:** Serotonin N acetyltransferase

Synonyms: DSPS; SNAT

Mammalian Cell Puromycin

Selection:

Vector:

pLenti-C-Myc-DDK-P2A-Puro (PS100092)

 Tag:
 Myc-DDK

 ACCN:
 NM\_001088

ORF Size: 621 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC210142).

OTI Disclaimer:

Sequence:

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**RefSeq:** <u>NM 001088.1</u>

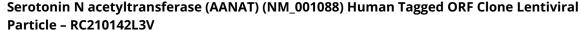
RefSeq Size: 1014 bp
RefSeq ORF: 624 bp
Locus ID: 15

UniProt ID: Q16613

Cytogenetics: 17q25.1

**Protein Pathways:** Metabolic pathways, Tryptophan metabolism







MW: 23.2 kDa

**Gene 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. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by

RefSeq, Oct 2009]