

Product datasheet for **RC229773L3V**

Serotonin N acetyltransferase (AANAT) (NM_001166579) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Serotonin N acetyltransferase (AANAT) (NM_001166579) Human Tagged ORF Clone Lentiviral Particle
Symbol:	AANAT
Synonyms:	DSPS; SNAT
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Tag:	Myc-DDK
ACCN:	NM_001166579
ORF Size:	756 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC229773).
OTI Disclaimer:	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:	NM_001166579.1 , NP_001160051.1
RefSeq Size:	1935 bp
RefSeq ORF:	759 bp
Locus ID:	15
UniProt ID:	Q16613
Cytogenetics:	17q25.1
Protein Pathways:	Metabolic pathways, Tryptophan metabolism



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MW: 28.4 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]