

Product datasheet for RC229773L4

Serotonin N acetyltransferase (AANAT) (NM_001166579) Human Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Serotonin N acetyltransferase (AANAT) (NM_001166579) Human Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	Serotonin N acetyltransferase
Synonyms:	DSPS; SNAT
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC229773).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

Cloning sites used for ORF Shuttling:

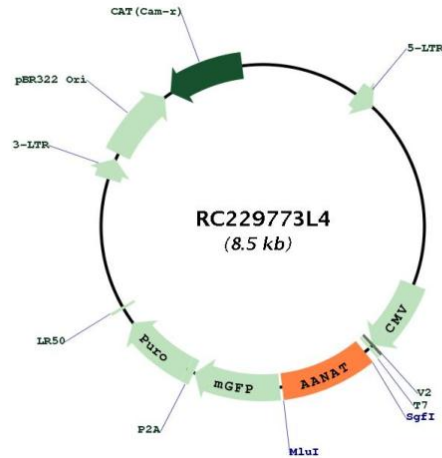


* The last codon before the Stop codon of the ORF.



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Plasmid Map:



ACCN: NM_001166579

ORF Size: 756 bp

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.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

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
MW:	28.4 kDa
Gene Summary:	<p>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]</p>