

## Product datasheet for **SC328411**

### Serotonin N acetyltransferase (AANAT) (NM\_001166579) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Serotonin N acetyltransferase (AANAT) (NM_001166579) Human Untagged Clone
Tag:	Tag Free
Symbol:	Serotonin N acetyltransferase
Synonyms:	DSPS; SNAT
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001166579, the custom clone sequence may differ by one or more nucleotides ATGGAGCCACAGTCTATGAAGGGACAGAAGAGGCCTTTTGGGGACCCTGGAGGTTGAAG GTGCTGGGAGGCCCTCCTTGGCTTAGGAGGACACTTCCAAGCTGGGGCGCCCAAGGAG GCACCAGTGGCCAGAATGTCCACGCAGAGCACCCACCCCTGAAACCTGAGGCCCCACGT CTGCCACCTGGGATCCCCGAGTCCCCGAGCTGTCAGCGGCCACACACTCCCTGCCAGT GAGTTTCGCTGCCTACCCCGGAGGACGCTGTCAGCGCCTTTGAGATCGAGCGTGAAGCC TTCATCTCCGTCTTGGGCGTCTGCCCCCTGTACCTGGATGAGATCCGGCACTTCTGACC CTATGTCCAGAGCTGTCCCTGGGCTGGTTCGAGGAGGGCTGCCTTGTGGCCTTCATCATC GGCTCGCTCTGGGACAAGGAGAGACTCATGCAGGAGTCACTGACGCTGCACAGGTCTGGG GGCCACATAGCCACCTGCATGTGCTGGCCGTGCACCGCGCTTCCGGCAGCAGGGCAGG GGCCCCATCCTGTGTGGCGCTACCTGCACCACCTGGGCAGCCAGCCGGCCGTGCGCCGG GCCGCGCTCATGTGCGAGGACGCGCTGGTACCCTTCTATGAGAGGTTTCAGCTTCCACGCC GTGGGCCCTGCGCCATCACCGTGGGCTCCCTCACCTTATGGAGCTCCACTGCTCCCTG CGGGGCCACCCCTTCTGCGCAGGAACAGCGGCTGCTGA
Restriction Sites:	Please inquire
ACCN:	NM_001166579
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).



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<b>OTI Annotation:</b>	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001166579.1</a> , <a href="#">NP_001160051.1</a>
<b>RefSeq Size:</b>	1935 bp
<b>RefSeq ORF:</b>	759 bp
<b>Locus ID:</b>	15
<b>UniProt ID:</b>	<a href="#">Q16613</a>
<b>Cytogenetics:</b>	17q25.1
<b>Protein Pathways:</b>	Metabolic pathways, Tryptophan metabolism
<b>Gene Summary:</b>	<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> <p>Transcript Variant: This variant (1) represents the longest transcript and encodes the longer isoform (1).</p>