

Product datasheet for **SC302969**

Serotonin N acetyltransferase (AANAT) (NM_001088) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Serotonin N acetyltransferase (AANAT) (NM_001088) Human Untagged Clone
Tag:	Tag Free
Symbol:	Serotonin N acetyltransferase
Synonyms:	DSPS; SNAT
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_001088 edited
CACAGTCCAGGTGCTGGGAGGCCCTCCTGGCTTAGGAGGACACTTCCAAAGCTGGGGCC
CCCCAAGGAGGCCACAGTGGCCAGAATGTCCACGCAGAGCACCCACCCCTGAAACCTGA
GGCCCCACGTCTGCCACCTGGGATCCCCGAGTCCCCGAGCTGTCAGCGGCCACACACT
CCCTGCCAGTGAGTTTCGCTGCCTCACCCGGAGGACGCTGTCAGCGCCTTTGAGATCGA
GCGTGAAGCCTTCATCTCCGTCTGGGCGTCTGCCCCCTGTACCTGGATGAGATCCGGCA
CTTCCTGACCCTATGTCCAGAGCTGTCCCTGGGCTGGTTCGAGGAGGGCTGCCTTGTGGC
CTTCATCATCGGCTCGCTCTGGGACAAGGAGAGACTCATGCAGGAGTCACTGACGCTGCA
CAGGTCTGGGGGCCACATAGCCACCTGCATGTGCTGGCCGTGCACCGCGCCTTCCGGCA
GCAGGGCAGGGGCCCATCCTGCTGTGGCGCTACCTGCACCACCTGGGCAGCCAGCCGGC
CGTGCGCCGGGCCGCGCTCATGTGCGAGGACGCGCTGGTACCCTTCTATGAGAGGTTTCA
CTTCCACGCCGTGGGCCCTGCGCCATCACCGTGGGCTCCCTCACCTTATGGAGCTCCA
CTGCTCCCTGCGGGGCCACCCCTTCTGCGCAGGAACAGCGGCTGCTGAACTGGGCTGCC
CACCTGGCTGCC

Restriction Sites: Please inquire

ACCN: NM_001088

Insert Size: 700 bp

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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OTI Annotation:	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.
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:	<ol style="list-style-type: none">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_001088.1 , NP_001079.1
RefSeq Size:	1014 bp
RefSeq ORF:	624 bp
Locus ID:	15
UniProt ID:	Q16613
Cytogenetics:	17q25.1
Protein Pathways:	Metabolic pathways, Tryptophan metabolism
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> <p>Transcript Variant: This variant (2) differs in the 5' UTR, lacks a portion of the 5' coding region, and initiates translation at a downstream start codon, compared to variant 1. The encoded isoform (2) is shorter than isoform 1.</p>