

Product datasheet for **RC229773**

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

Product data:

Product Type:	Expression Plasmids
Product Name:	Serotonin N acetyltransferase (AANAT) (NM_001166579) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Serotonin N acetyltransferase
Synonyms:	DSPS; SNAT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC229773 representing NM_001166579 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGCCACAGTCTATGAAGGGACAGAAGAGGCCTTTTGGGGACCCTGGAGGTTGAAGGTGCTGGGAG
GCCCTCCTGGCTTAGGAGGACACTTCCAAGCTGGGGCGCCCAAGGAGGCACCACTGGCCAGAATGTC
CACGCAGAGCACCCACCCCTGAAACCTGAGGCCACGCTGCCACCTGGGATCCCGAGTCCCGGAGC
TGTCAGCGGCCACACACTCCCTGCCAGTGAGTTTCGCTGCCTACCCCGGAGGACGCTGTCAGCGCT
TTGAGATCGAGCGTGAAGCCTTCATCTCGTCTTGGCGTCTGCCCCCTGTACCTGGATGAGATCCGGCA
CTTCTGACCCTATGTCCAGAGCTGTCCCTGGGCTGGTTTCGAGGAGGGCTGCCTTGTGGCCTTCATCATC
GGCTCGCTCTGGGACAAGGAGAGACTCATGCAGGAGTCACTGACGCTGCACAGGTCTGGGGCCACATAG
CCCACCTGCATGTGCTGGCCGTGCACCGCGCTTCCGGCAGCAGGGCAGGGGCCCATCCTGCTGTGGCG
CTACCTGCACCACCTGGGAGCCAGCCGGCCGTGCGCCGGCCGCGCTCATGTGCGAGGACGCGCTGGTA
CCCTTCTATGAGAGGTTCACTTCCACGCCGTGGGCCCTGCGCCATCACCGTGGGCTCCCTCACCTTCA
TGGAGCTCCACTGCTCCCTGCGGGGCCACCCCTTCTGCGCAGGAACAGCGGCTGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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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](#)

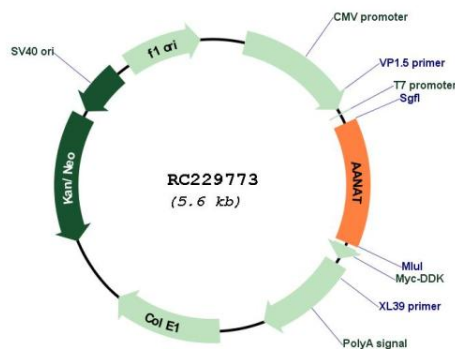
Cytogenetics: 17q25.1

Protein Pathways: Metabolic pathways, Tryptophan metabolism

MW: 28.4 kDa

Gene Summary: 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]

Product images:



Circular map for RC229773