



# Recombinant Human Serotonin N-acetyltransferase (AANAT)

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| <b>Product Code</b>      | CSB-BP623090HU   |
| <b>Abbreviation</b>      | AANAT  |
| <b>Storage</b>           | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.<br>Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.   |
| <b>Uniprot No.</b>       | Q16613   |
| <b>Product Type</b>      | Recombinant Protein  |
| <b>Immunogen Species</b> | Homo sapiens (Human)   |
| <b>Purity</b>            | ≥85% (SDS-PAGE)  |
| <b>Sequence</b>          | MSTQSTHPLK PEAPRLPPGI PESPSCQRRH TLPASEFRCL TPEDAVSAFE<br>IEREAFISVL GVCPLYLDEI RHFLTLCPEL SLGWFEEGCL VAFIIGSLWD<br>KERLMQESLT LHRSGGHIAH LHVLAHVRAF RQQGRGPILL WRYLHHLGSQ<br>PAVRRALMC EDALVPFYER FSFHAVGPCA ITVGSLTFME LHCSLRGHPF<br>LRRNSGC   |
| <b>Source</b>            | Baculovirus  |
| <b>Target Names</b>      | AANAT  |
| <b>Protein Names</b>     | Recommended name: Serotonin N-acetyltransferase Short name= Serotonin acetylase EC= 2.3.1.87 Alternative name(s): Aralkylamine N-acetyltransferase Short name= AA-NAT  |
| <b>Expression Region</b> | 1-207  |
| <b>Notes</b>             | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.  |
| <b>Tag Info</b>          | Tag type will be determined during the manufacturing process.  |
| <b>Protein Length</b>    | full length protein  |
| <b>Target Details</b>    | This protein 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. |
| <b>Reconstitution</b>    | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final  |



concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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