

Recombinant Rat Aanat protein, His & T7-tagged

Cat. No. Aanat-1991R **Lot. No.** (See product label)

SPECIFICATION

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|-------------------------|---|
| Product Overview | Recombinant Rat Aanat aa. (Glu22~Gln235) fused with N-terminal His & T7 tag was produced in E. coli cells. |
| Species | Rat |
| Source | E.coli |
| ProteinLength | Glu22~Gln235 |
| Description | 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. |
| Form | Freeze-dried powder |
| Molecular Mass | 37kDa as determined by SDS-PAGE reducing conditions. |
| Endotoxin | <1.0EU per 1ug (determined by the LAL method) |
| Purity | > 90% |

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|-----------------------|---|
| Characteristic | The isoelectric point is 5.5. |
| Applications | SDS-PAGE; WB; ELISA; IP. |
| Stability | The thermal stability is described by the loss rate of the target protein. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. (Referring from China Biological Products Standard, which was calculated by the Arrhenius equation.) The loss of this protein is less than 5% within the expiration date under appropriate storage condition. |
| Storage | Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months. |
| Storage Buffer | Supplied as lyophilized form in 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% sarcosyl, 5% trehalose, and preservative. |
| Reconstitution | Reconstitute in sterile ddH ₂ O. |

GENE INFORMATION

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|------------------------|---|
| Gene Name | Aanat aralkylamine N-acetyltransferase [Rattus norvegicus (Norway rat)] |
| Official Symbol | Aanat |
| Synonyms | Ptpn3; protein tyrosine phosphatase, non-receptor type 3; PTPCL; PTP-H1; 9530011I20Rik; tyrosine-protein phosphatase non-receptor type 3; protein-tyrosine phosphatase H1 |
| Gene ID | 25120 |

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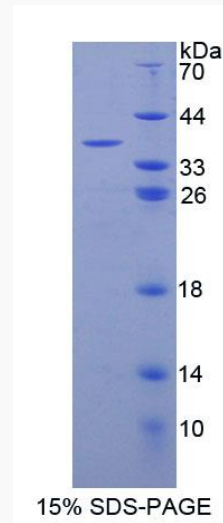
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mRNA Refseq [NM_012818.2](#)

Protein Refseq [NP_036950.1](#)

UniProt ID [Q64666](#)



SDS-PAGE

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