

Recombinant Mouse Aanat protein, His & T7-tagged

Cat. No. Aanat-1990M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse Aanat aa. (Glu22~Lys236) fused with N-terminal His & T7 tag was produced in E. coli cells.
Species	Mouse
Source	E.coli
ProteinLength	Glu22~Lys236
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. Alternative splicing results in multiple transcript variants.
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 7.2.
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

Gene Name	Aanat arylalkylamine N-acetyltransferase [Mus musculus (house mouse)]
Official Symbol	Aanat
Synonyms	PTPN3; protein tyrosine phosphatase, non-receptor type 3; PTPH1; PTP-H1; tyrosine-protein phosphatase non-receptor type 3; cytoskeletal-associated protein tyrosine phosphatase; protein-tyrosine phosphatase H1
Gene ID	11298

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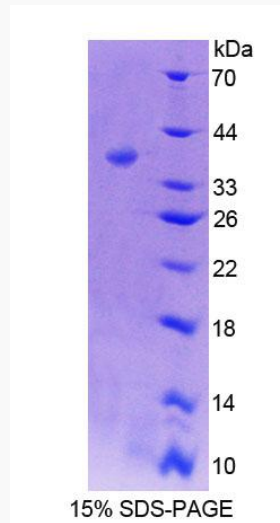
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mRNA Refseq [NM_009591.3](#)

Protein Refseq [NP_033721.1](#)

UniProt ID [O88816](#)



SDS-PAGE

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