

## Basic Information

<b>Product Name</b>	Anti-AANAT Antibody (Clone#OTI6E1)
<b>Gene Name</b>	Aanat
<b>Source</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	IgG1
<b>Species Reactivity</b>	human
<b>Tested Application</b>	WB
<b>Contents</b>	PBS (PH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
<b>Immunogen</b>	Human recombinant protein fragment corresponding to amino acids 1-72 of human AANAT (NP_001079) produced in E.coli.
<b>Concentration</b>	500 ug/ml
<b>Purification</b>	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
<b>Observed MW</b>	23 kDa
<b>Dilution Ratios</b>	Western blot (WB):1:2000

## Storage

Stable for 12 months from date of receipt. Store at -20°C as received.

## Background Information

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]

## Selected Validation Data

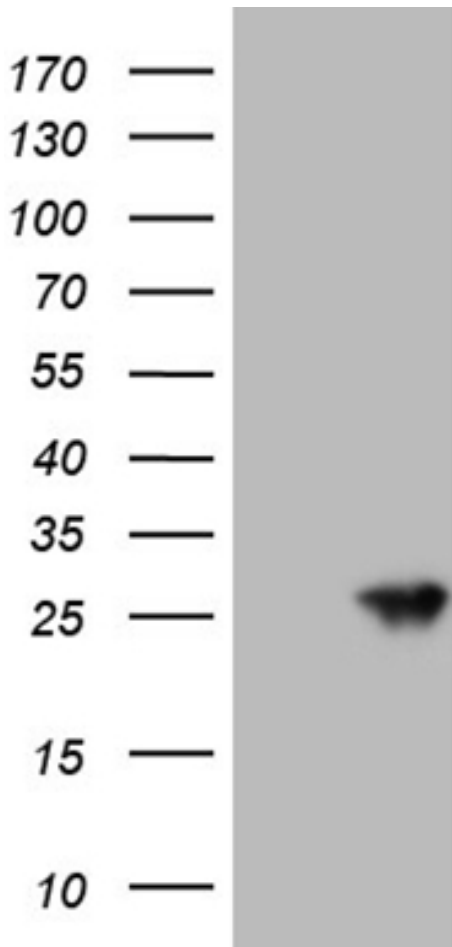


Figure 1. HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY AANAT (Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-AANAT (1:2000).