



## phospho-AANAT (Thr29) Rabbit pAb

Catalog Number: bs-11448R

Target Protein: phospho-AANAT (Thr29)

Concentration: 1mg/ml

Form: Liquid Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500), ICC/IF (1:100-500), ELISA (1:5000-10000)

Reactivity: (predicted:Human, Mouse, Rat, Pig, Chicken, Dog)

Predicted MW: 23 kDa Entrez Gene: 15

Swiss Prot: Q16613

Source: KLH conjugated synthesised phosphopeptide derived from human AANAT around the

phosphorylation site of Thr29: RH(p-T)LP.

Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: 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

 $transcript\ variants\ encoding\ different\ is of orms\ have\ been\ found\ for\ this\ gene.\ [provided\ by$ 

RefSeq].

## PRODUCT SPECIFIC PUBLICATIONS

[IF=10.3] Jinho Kim. et al. Biosynthesis of neuroprotective melatonin is dysregulated in Huntington's disease. J PINEAL RES. 2023 Sep;:e12909 WB; Human, Mouse. 37721126