# abcam

## Product datasheet

## Anti-AANAT antibody ab3505

## 1 Abreviews 12 References

#### 製品の概要

製品名 Anti-AANAT antibody

製品の詳細 Rabbit polyclonal to AANAT

由来種 Rabbit

アプリケーション 適用あり: IHC-P, WB

種交差性 交差種: Rat

交差が予測される動物種: Mouse, Chicken, Hamster, Human, Chimpanzee, Rhesus monkey

A

免疫原 Synthetic peptide corresponding to Mouse AANAT aa 1-100 (N terminal).

Database link: **088816** 

特記事項

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

#### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

パッファー Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 99% PBS

精製度 Immunogen affinity purified

特記事項(精製) Total anti-N-terminal AA-NAT-specific lgG was affinity purified on resin-coupled non-

phosphopeptide. Phospho-specific amino-terminal IgG was subsequently isolated on resin-

coupled phosphopeptide.

一次抗体 備考 Pineal gland serotonin N-acetyltransferase (arylalkylamine N-acetyltransferase, AA-NAT) is an

~23 kDa protein which is the rate-limiting enzyme in melatonin synthesis. Melatonin serves as the

hormonal signal of the daily light/dark cycle, or body clock. The nocturnal oscillation in enzyme activity ranges by 10- to 100-fold depending on species among vertebrates. Studies have shown that AA-NAT is regulated by cAMP at both the mRNA and protein levels. AA-NAT has putative protein kinase A (PKA) sites at Thr 29 and Ser 206. Phosphorylation of AA-NAT at these residues might play a role in protein inactivation via proteasome-dependent degradation.

**ポリ/モノ** ポリクローナル

アイソタイプ IgG

#### アプリケーション

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アプリケーション	Abreviews	特記事項
IHC-P		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 23 kDa.  This antibody detects an ~23 kDa protein representing unphosphorylated and phosphorylated AA-NAT from rat pineal gland whole protein extract.

#### ターゲット情報

機能	Controls the night/day rhythm of melatonin production in the pineal gland. Catalyzes the Nacetylation of serotonin into N-acetylserotonin, the penultimate step in the synthesis of melatonin.
組織特異性	Highly expressed in pineal gland and at lower levels in the retina. Weak expression in several brain regions and in the pituitary gland.
パスウェイ	Aromatic compound metabolism; melatonin biosynthesis; melatonin from serotonin: step 1/2.
関連疾患	Delayed sleep phase syndrome
配列類似性	Belongs to the acetyltransferase family. AANAT subfamily.  Contains 1 N-acetyltransferase domain.
翻訳後修飾	cAMP-dependent phosphorylation on both N-terminal Thr-31 and C-terminal Ser-205 regulates AANAT activity by promoting interaction with 14-3-3 proteins.
細胞内局在	Cytoplasm.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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