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Product datasheet

Anti-AANAT antibody ab3505

1 Abreviews 12 References

概述

产品名称 Anti-AANAT抗体

描述 兔多克隆抗体to AANAT

宿主 Rabbit

种属反应性 与反应: Rat

预测可用于: Mouse, Chicken, Hamster, Human, Chimpanzee, Rhesus monkey

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

Database link: **O88816**

Run BLAST with
Run BLAST with

常规说明

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

性能

形式 Liquid

存放说明 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.

存储溶液 Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 99% PBS

纯**度** Immunogen affinity purified

纯**化**说明 Total anti-N-terminal AA-NAT-specific IgG was affinity purified on resin-coupled non-

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

coupled phosphopeptide.

Primary antibody说明 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

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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.

克隆 多克隆 **同种型** IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab3505于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
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.

靶标

功能	Controls the night/day rhythm of melatonin production in the pineal gland. Catalyzes the Nacetylation of serotonin into Nacetylserotonin, the penultimate step in the synthesis of melatonin.
组织 特异性	Highly expressed in pineal gland and at lower levels in the retina. Weak expression in several brain regions and in the pituitary gland.
通路	Aromatic compound metabolism; melatonin biosynthesis; melatonin from serotonin: step 1/2.
疾病相关	Delayed sleep phase syndrome
序列相似性	Belongs to the acetyltransferase family. AANAT subfamily. Contains 1 N-acetyltransferase domain.
翻译后 修 饰	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.
细胞定位	Cytoplasm.

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