

Anti-Nocturnin Antibody

Catalog # AP53828

## Specification

# Anti-Nocturnin Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB <u>O9UK39</u> Human, Mouse, Rat Rabbit Polyclonal 48196

## **Anti-Nocturnin Antibody - Additional Information**

Gene ID 25819

**Other Names** CCR4; NOC; Nocturnin; Carbon catabolite repression 4-like protein; Circadian deadenylase NOC

**Target/Specificity** Recognizes endogenous levels of Nocturnin protein.

**Dilution** WB~~1/500 - 1/1000

**Format** Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

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

### Anti-Nocturnin Antibody - Protein Information

Name NOCT (<u>HGNC:14254</u>)

Synonyms CCR4, CCRN4L, NOC

### Function

Phosphatase which catalyzes the conversion of NADP(+) to NAD(+) and of NADPH to NADH (PubMed:<a href="http://www.uniprot.org/citations/31147539" target="\_blank">31147539</a>). Shows a small preference for NADPH over NADP(+) (PubMed:<a href="http://www.uniprot.org/citations/31147539" target="\_blank">31147539</a>). Represses translation and promotes degradation of target mRNA molecules (PubMed:<a href="http://www.uniprot.org/citations/29860338" target="\_blank">29860338</a>). Plays an important role in post-transcriptional regulation of metabolic genes under circadian control (By similarity). Exerts a rhythmic post- transcriptional control of genes necessary for metabolic functions including nutrient absorption, glucose/insulin sensitivity, lipid metabolism, adipogenesis,



inflammation and osteogenesis (By similarity). Plays an important role in favoring adipogenesis over osteoblastogenesis and acts as a key regulator of the adipogenesis/osteogenesis balance (By similarity). Promotes adipogenesis by facilitating PPARG nuclear translocation which activates its transcriptional activity (By similarity). Regulates circadian expression of NOS2 in the liver and negatively regulates the circadian expression of IGF1 in the bone (By similarity). Critical for proper development of early embryos (By similarity).

#### **Cellular Location**

Cytoplasm {ECO:0000250|UniProtKB:O35710}. Nucleus {ECO:0000250|UniProtKB:O35710}. Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:O35710}. Mitochondrion

#### **Tissue Location**

Adipose tissue. Expression is higher in subcutaneous adipose tissue as compared to visceral adipose tissue

### **Anti-Nocturnin Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### Anti-Nocturnin Antibody - Images



Western blot analysis of Nocturnin expression in mouse muscle (A), rat muscle (B) whole cell lysates.

## Anti-Nocturnin Antibody - Background

Rabbit polyclonal antibody to Nocturnin