

For Research Use Only

# CLOCK Polyclonal antibody

Catalog Number: 18094-1-AP

Featured Product

16 Publications



## Basic Information

**Catalog Number:**

18094-1-AP

**Size:**

500 µg/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG12826

**GenBank Accession Number:**

BC041878

**GeneID (NCBI):**

9575

**UNIPROT ID:**

O15516

**Full Name:**

clock homolog (mouse)

**Calculated MW:**

846 aa, 95 kDa

**Observed MW:**

95-110 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:500-1:2000

IHC 1:250-1:1000

IF 1:20-1:200

## Applications

**Tested Applications:**

IF/ICC, IHC, WB, ELISA

**Cited Applications:**

WB, IF, IHC

**Species Specificity:**

human

**Cited Species:**

human, mouse

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

WB : HEK-293 cells, HeLa cells, PC-3 cells

IHC : human liver tissue,

IF : HeLa cells,

## Background Information

Circadian locomotor output cycles protein kaput (CLOCK), also named as BHLHE8 or KIAA0334, is a 846 amino acid protein, which contains one bHLH domain, one PAC domain, and two PAS domains. CLOCK localizes in the nucleus and cytoplasm. CLOCK is expressed in all tissues examined including spleen, thymus, prostate, testis, ovary, small intestine, colon, leukocytes, heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. ARNTL/2-CLOCK heterodimers activate E-box element (5'-CACGTG-3') transcription of a number of proteins of the circadian clock, such as PER1 and PER2. The calculated molecular weight of CLOCK is 95kDa, we detected a 95-110 kDa protein by western blot. Our result is similar to the result of research paper (PMID: 30683868).

## Notable Publications

| Author         | Pubmed ID | Journal       | Application |
|----------------|-----------|---------------|-------------|
| Xin Zhu        | 36373572  | Br J Nutr     | WB          |
| Apirada Padlom | 36376366  | Sci Rep       | WB          |
| Xiyan Tan      | 34124276  | J Immunol Res | IHC,WB      |

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

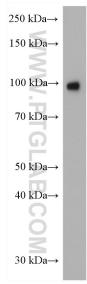
T: 4006900926

E: Proteintech-CN@ptglab.com

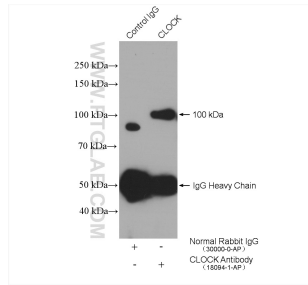
W: ptgcn.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

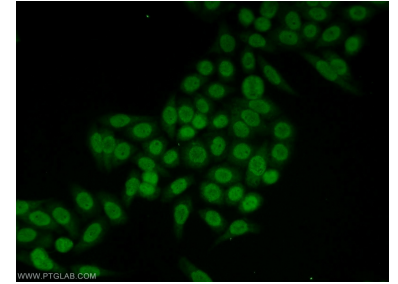
## Selected Validation Data



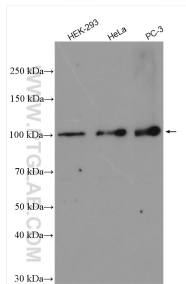
HEK-293 cells were subjected to SDS PAGE followed by western blot with 18094-1-AP (CLOCK antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



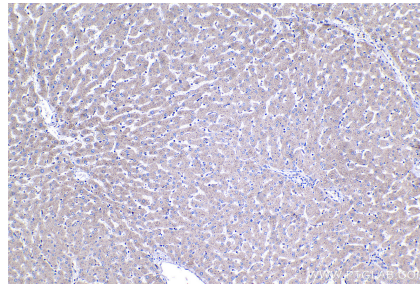
IP result of anti-CLOCK (IP:18094-1-AP, 4ug; Detection:18094-1-AP 1:300) with HeLa cells lysate 1600 ug.



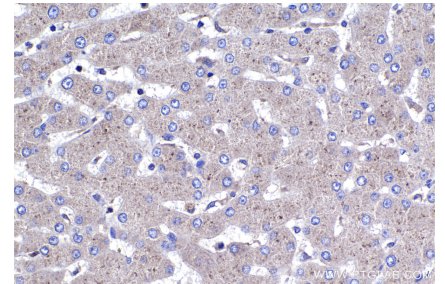
Immunofluorescent analysis of HeLa cells using 18094-1-AP (CLOCK antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Various lysates were subjected to SDS PAGE followed by western blot with 18094-1-AP (CLOCK antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 18094-1-AP (CLOCK antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 18094-1-AP (CLOCK antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).