

For Research Use Only

# Cryptochrome 1 Polyclonal antibody



Catalog Number: 13474-1-AP

Featured Product

24 Publications

## Basic Information

**Catalog Number:**

13474-1-AP

**Size:**

550 µg/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG4270

**GenBank Accession Number:**

BC030519

**GeneID (NCBI):**

1407

**UNIPROT ID:**

Q16526

**Full Name:**

cryptochrome 1 (photolyase-like)

**Calculated MW:**

586 aa, 66 kDa

**Observed MW:**

60-66 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:1000-1:5000

IHC 1:50-1:500

IF 1:10-1:100

## Applications

**Tested Applications:**

FC, IF/ICC, IHC, WB, ELISA

**Cited Applications:**

WB, IF, CoIP

**Species Specificity:**

human, mouse, rat

**Cited Species:**

human, rat, 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:** HeLa cells, Y79 cells, mouse liver tissue, rat liver tissue

**IHC:** mouse brain tissue, human breast cancer tissue

**IF:** HeLa cells, MCF-7 cells

## Background Information

Cryptochrome circadian clock 1 (CRY1) is a flavin adenine dinucleotide-binding protein with MW of 66 kDa. CRY1 is a key component of the circadian core oscillator complex, which regulates the circadian clock. CRY1 predominantly displays evening-time expression and serves as a strong repressor of morning-time elements (E box/E-prime box) when bound to the BMAL1 (ARNTL; 602550)/CLOCK (601851) complex (PubMed: 21236481). This antibody can recognize CRY1 and CRY2 due to the high homology.

## Notable Publications

Author	Pubmed ID	Journal	Application
Wen-Ya Huang	28986813	Chin J Integr Med	WB
Guohua Ji	31585206	Free Radic Biol Med	WB
Pieterjan Dierickx	28536247	EMBO Rep	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:

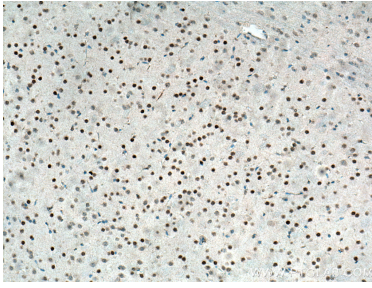
T: 4006900926

E: Proteintech-CN@ptglab.com

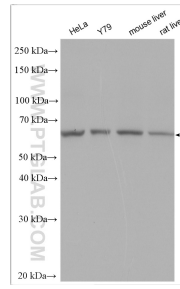
W: ptgcn.com

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

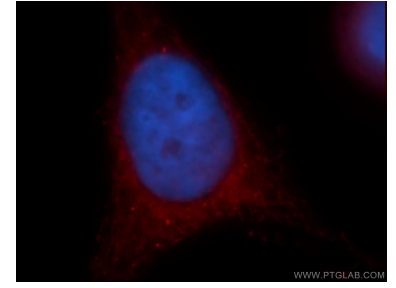
## Selected Validation Data



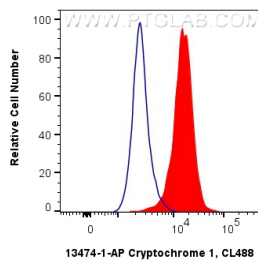
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 13474-1-AP (Cryptochrome 1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Various lysates were subjected to SDS PAGE followed by western blot with 13474-1-AP (Cryptochrome 1 antibody) at dilution of 1:2500 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of HeLa cells, using CRY1 antibody 13474-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).



1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human Cryptochrome 1 (13474-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP, Clone: ) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).