

For Research Use Only

# Cryptochrome 2 Polyclonal antibody

Catalog Number: 13997-1-AP

Featured Product

37 Publications



## Basic Information

### Catalog Number:

13997-1-AP

### Size:

150ul, Concentration: 650 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG5085

### GenBank Accession Number:

BC041814

### GeneID (NCBI):

1408

### UNIPROT ID:

Q49AN0

### Full Name:

cryptochrome 2 (photolyase-like)

### Calculated MW:

593 aa, 67 kDa

### Observed MW:

65-70 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:500-1:1000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:50-1:500

IF/ICC: 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF, CoIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat

**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: mouse brain tissue, Y79 cells, rat brain tissue

IP: mouse brain tissue,

IHC: mouse brain tissue,

IF/ICC: SH-SY5Y cells,

## Background Information

Cryptochrome circadian clock 2 (CRY2) is a flavin adenine dinucleotide-binding protein that is a key component of the circadian core oscillator complex, which regulates the circadian clock. Loss of CRY2 stabilizes c-MYC and enhances cellular transformation. CRY2 can function as a co-factor for the SCF substrate adaptor FBXL3 (PMID: 27840026). CRY2 has two isoform with MW of 60 and 67 kDa. This antibody can recognize CRY1 and CRY2 due to the high homology.

## Notable Publications

Author	Pubmed ID	Journal	Application
Juan M Barajas	34599880	Am J Pathol	WB
Wen-Ya Huang	28986813	Chin J Integr Med	WB
Guohua Ji	31585206	Free Radic Biol Med	WB

## Storage

### Storage:

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

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

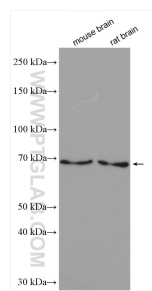
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

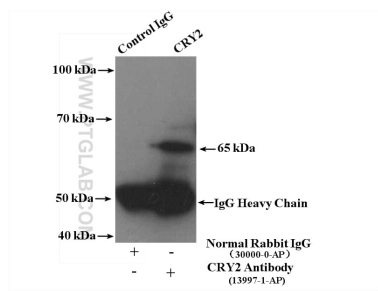
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

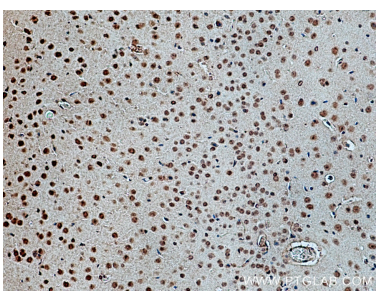
Selected Validation Data



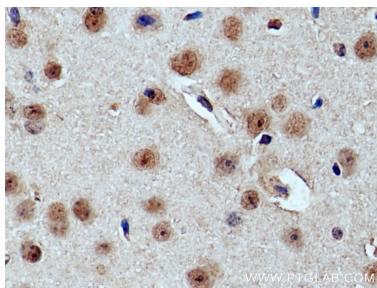
Various lysates were subjected to SDS PAGE followed by western blot with 13997-1-AP (Cryptochrome 2 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



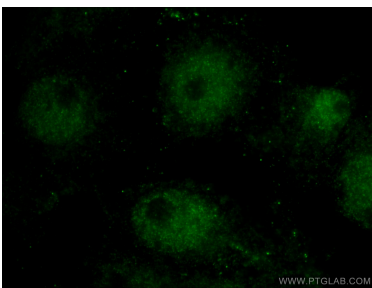
IP result of anti-Cryptochrome 2 (IP:13997-1-AP, 4ug; Detection:13997-1-AP 1:300) with mouse brain tissue lysate 5200ug.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 13997-1-AP (Cryptochrome 2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 13997-1-AP (Cryptochrome 2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (10% Formaldehyde) fixed SH-SY5Y cells using 13997-1-AP (Cryptochrome 2 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated Goat Anti-Rabbit IgG(H+L).