## For Research Use Only

## Cryptochrome 1 Polyclonal antibody

Catalog Number: 13474-1-AP

Featured Product

31 Publications



**Basic Information** 

 Catalog Number:
 GenBank Accession Number:

 13474-1-AP
 BC030519

 Size:
 GeneID (NCBI):

 550 ug/ml
 1407

 Source:
 UNIPROT ID:

 Rabbit
 Q16526

cryptochrome 1 (photolyase-like)

Immunogen Catalog Number:Calculated MW:AG4270586 aa, 66 kDaObserved MW:

60-66 kDa

Full Name:

**Applications** 

**Tested Applications:** 

Isotype:

WB, IHC, IF/ICC, FC (Intra), ELISA

Cited Applications: WB, 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: HeLa cells, Y79 cells, mouse liver tissue, rat liver

**Purification Method:** 

WB 1:1000-1:5000 IHC 1:50-1:500

IF/ICC 1:200-1:800

Antigen affinity purification

Recommended Dilutions:

tissue

IHC: mouse brain tissue, human breast cancer tissue

IF/ICC : 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

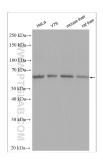
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

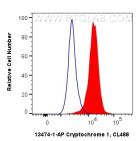
## **Selected Validation Data**



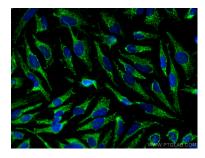
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 13474-1-AP (Cryptochrome 1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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.



1X10^6 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).



Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using Cryptochrome 1 antibody (13474-1-AP) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).