For Research Use Only

Cryptochrome 2 Polyclonal antibody

Catalog Number: 13997-1-AP

Featured Product

37 Publications



Basic Information

Catalog Number: GenBank Accession Number: 13997-1-AP BC041814 GeneID (NCBI): Concentration: 650 μg/ml 1408 **UNIPROT ID:** Source: Rabbit Q49AN0 Full Name: Isotype:

cryptochrome 2 (photolyase-like)

Calculated MW: Immunogen Catalog Number: AG5085 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

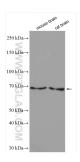
Storage:

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

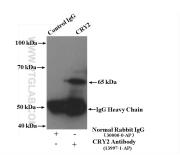
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



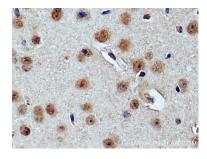
Various lysates were subjected to SDS PAGE followed by western blot with 13997-1-AP (Cryptochrome 2 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



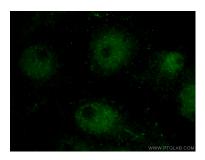
IP result of anti-Cryptochrome 2 (IP:13997-1-AP, 4ug; Detection:13997-1-AP 1:300) with mouse brain tissue lysate 5200ug.



Immunohistochemical analysis of paraffinembedded 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 paraffinembedded 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).