

For Research Use Only

# CHCHD2 Polyclonal antibody

Catalog Number: 19424-1-AP

Featured Product

40 Publications



## Basic Information

### Catalog Number:

19424-1-AP

### Size:

150ul, Concentration: 550 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG13752

### GenBank Accession Number:

BC003079

### GeneID (NCBI):

51142

### UNIPROT ID:

Q9Y6H1

### Full Name:

coiled-coil-helix-coiled-coil-helix domain containing 2

### Calculated MW:

151 aa, 16 kDa

### Observed MW:

16-18 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:2000

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

IHC 1:50-1:500

IF/ICC 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF, CoIP

### Species Specificity:

human, mouse

### Cited Species:

human, mouse, drosophila

**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** : HT-1080 cells, HEK-293 cells, human adrenal gland tissue, HepG2 cells

**IP** : HepG2 cells,

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

**IF/ICC** : HepG2 cells,

## Background Information

CHCHD2 is a widely expressed 16.7-kDa mitochondrion-localized protein. CHCHD2 contains a C-terminal CHCH (coiled-coil helix coiled-coil helix) domain. Mutations in CHCHD2 gene have been reported in autosomal dominant Parkinson's disease (ADPD). CHCHD2 is a bi-organellar mediator of oxidative phosphorylation, playing crucial roles in regulating electron flow in the mitochondrial electron transport chain and acting as a nuclear transcription factor for a cytochrome c oxidase subunit (COX4l2) and itself in response to hypoxic stress. CHCHD2 also regulates cell migration and differentiation, mitochondrial cristae structure, and apoptosis (PMID: 33967741).

## Notable Publications

Author	Pubmed ID	Journal	Application
Alec S T Smith	34660586	Front Cell Dev Biol	IHC
Maxime Feyeux	22678061	Hum Mol Genet	WB
Da-Yuan Chen	33140044	bioRxiv	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

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

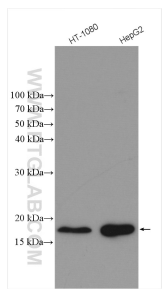
For technical support and original validation data for this product please contact:

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

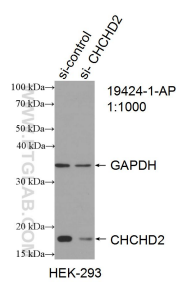
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

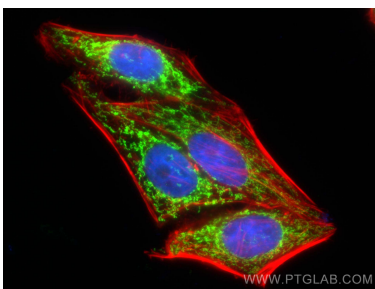
Selected Validation Data



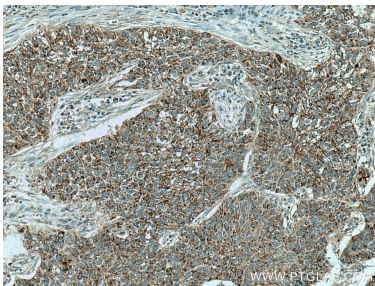
Various lysates were subjected to SDS PAGE followed by western blot with 19424-1-AP (CHCHD2 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



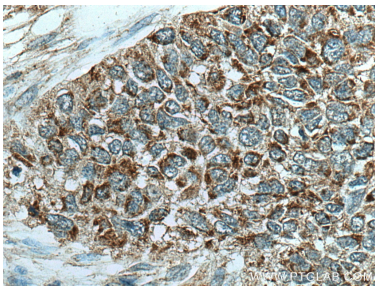
WB result of CHCHD2 antibody (19424-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-CHCHD2 transfected HEK-293 cells.



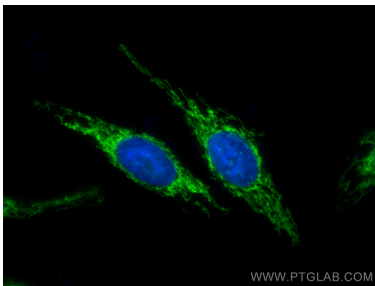
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using CHCHD2 antibody (19424-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).



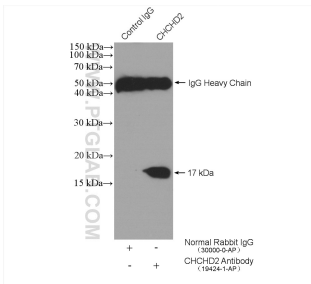
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 19424-1-AP (CHCHD2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 19424-1-AP (CHCHD2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using CHCHD2 antibody (19424-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).



IP result of anti-CHCHD2 (IP:19424-1-AP, 4ug; Detection:19424-1-AP 1:1000) with HepG2 cells lysate 2520 ug.