

For Research Use Only

# CHD4 Polyclonal antibody

Catalog Number: 14173-1-AP

Featured Product

8 Publications



## Basic Information

### Catalog Number:

14173-1-AP

### Size:

350 µg/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG5372

### GenBank Accession Number:

BC038596

### GeneID (NCBI):

1108

### UNIPROT ID:

Q14839

### Full Name:

chromodomain helicase DNA binding protein 4

### Calculated MW:

1937 aa, 221 kDa

### Observed MW:

260 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:3000

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

IHC 1:50-1:500

IF 1:200-1:800

## Applications

### Tested Applications:

IF/ICC, IHC, IP, WB, ELISA

### Cited Applications:

ChIP, CoIP, IF, IHC, WB

### Species Specificity:

human

### Cited Species:

human, mouse

### Positive Controls:

WB: HEK-293 cells, HeLa cells

IP: HeLa cells,

IHC: human cervical cancer tissue,

IF: HeLa cells, A549 cells

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

Chromodomain helicase DNA-binding protein 4 (CHD4) is an ATP dependent chromatin remodeler and a major subunit of the repressive NuRD complex [PMID:9790534]. This complex plays key roles in transcriptional regulation and reorganization and maintenance of chromatin structure, as it targets pericentromeric heterochromatin and has recently been implicated in DNA damage repair, being rapidly recruited to DNA double strand breaks [PMID:17694084]. CHD4 is a novel BRIT1 binding partner that regulates the HR repair process, which is a critical pathway of repairing DNA double strand breaks and plays an essential role in maintaining genomic integrity [PMID:22219182]. The calculated molecular weight of CHD4 is 218 kDa, but modified CHD4 is about 250-280 kDa.

## Notable Publications

Author	Pubmed ID	Journal	Application
Jun Zhang	36075559	Cell Signal	WB,IHC
Xiaoyun Sun	35650610	Mol Autism	WB
B A Vishwakarma	26205084	Leukemia	

## 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:

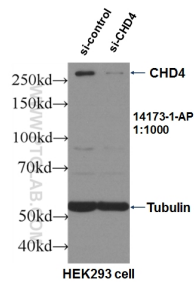
T: 4006900926

E: Proteintech-CN@ptglab.com

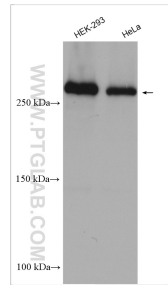
W: ptgcn.com

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

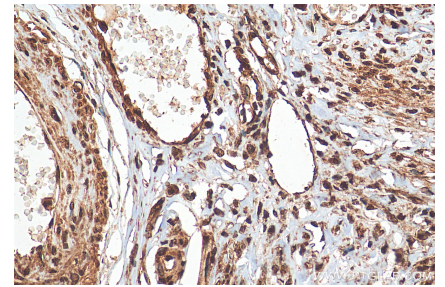
## Selected Validation Data



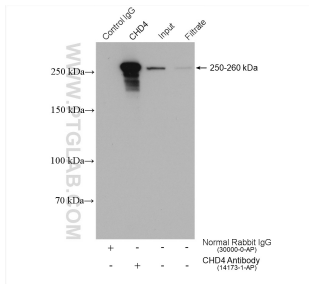
WB result of CHD4 antibody (14173-1-AP, 1:1000) with si-Control and si-CHD4 transfected HEK293 cells.



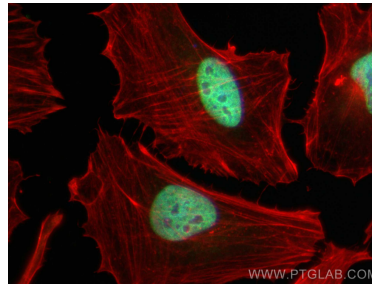
Various lysates were subjected to SDS PAGE followed by western blot with 14173-1-AP (CHD4 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using 14173-1-AP (CHD4 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-CHD4 (IP:14173-1-AP, 4ug; Detection:14173-1-AP 1:1000) with HeLa cells lysate 1880 ug.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CHD4 antibody (14173-1-AP) at dilution of 1:400 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).