

For Research Use Only

# CHD4 Polyclonal antibody

Catalog Number: 14173-1-AP

Featured Product

4 Publications



## Basic Information

### Catalog Number:

14173-1-AP

### Size:

150UL, Concentration: 193 µg/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG5372

### GenBank Accession Number:

BC038596

### GeneID (NCBI):

1108

### 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 1:500-1:1000

IP 0.5-4.0 µg for IP and 1:200-1:1000

for WB

IHC 1:20-1:200

IF 1:20-1:200

## Applications

### Tested Applications:

IF, IHC, IP, WB, ELISA

### Cited Applications:

ChIP, IF, WB

### Species Specificity:

human

### Cited Species:

human

**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, HEK-293 cells

IP: HeLa cells,

IHC: human cervical cancer tissue,

IF: A549 cells,

## 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
B A Vishwakarma	26205084	Leukemia	
Simin Shao	32070428	Clin Epigenetics	WB,IF
Matteo Vecellio	33369221	Arthritis Rheumatol	WB,ChIP

## 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

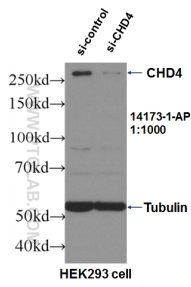
For technical support and original validation data for this product please contact:

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

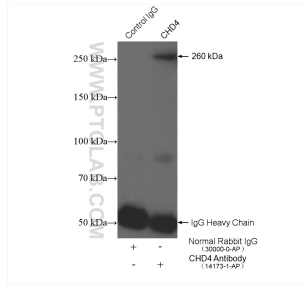
E: proteintech@ptglab.com  
W: ptglab.com

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

## Selected Validation Data



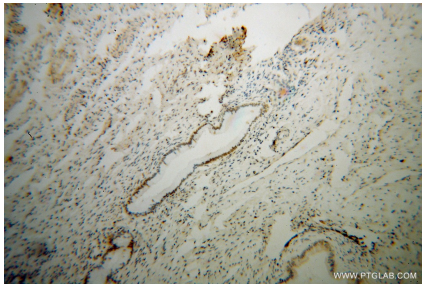
WB result of CHD4 antibody (14173-1-AP, 1:1000) with si-Control and si-CHD4 transfected HEK293 cells.



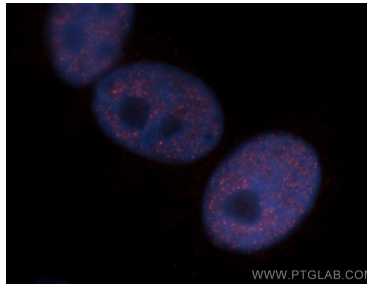
IP result of anti-CHD4 (IP:14173-1-AP, 4ug; Detection:14173-1-AP 1:300) with HeLa cells lysate 2640 ug.



HeLa cells were subjected to SDS PAGE followed by western blot with 14173-1-AP (CHD4 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human cervical cancer using 14173-1-AP (CHD4 antibody) at dilution of 1:100 (under 10x lens).



Immunofluorescent analysis of A549 cells, using CHD4 antibody 14173-1-AP at 1:50 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).