

For Research Use Only

# CHAF1A Polyclonal antibody

Catalog Number: 17037-1-AP

Featured Product

7 Publications



## Basic Information

### Catalog Number:

17037-1-AP

### Size:

600 µg/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG10536

### GenBank Accession Number:

BC067093

### GeneID (NCBI):

10036

### UNIPROT ID:

Q13111

### Full Name:

chromatin assembly factor 1, subunit A (p150)

### Calculated MW:

956 aa, 107 kDa

### Observed MW:

150 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:1000-1:4000

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

IHC 1:20-1:200

## Applications

### Tested Applications:

IHC, IP, WB, ELISA

### Cited Applications:

WB, IF, IHC, ChIP

### Species Specificity:

human, mouse

### Cited Species:

human, mouse

**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: Jurkat cells, HeLa cells

IP: Jurkat cells,

IHC: human cervix tissue,

## Background Information

Chromatin assembly factor 1 (CAF1) is the only histone chaperone known to assemble histones H3 and H4 onto newly synthesized DNA both in vitro and in vivo [PMID:17065558]. The 938 amino acid multidomain p150 (CHAF1A) binds via its C-terminal third to p60, which is an essential step for nucleosome assembly because knocking down either subunit disrupts the activity [PMID:14519857]. In addition, CAF1 facilitates DNA synthesis depending on the binding of the N-terminal 31 residues of p150 to the proliferating cell nuclear antigen (PCNA), which acts as a sliding clamp to stimulate the processivity of DNA polymerase [PMID:10648606]. CHAF1A regulates the formation of heterochromatin in mammalian cells during replication and in plants it maintains the transcription of certain subsets of genes. Furthermore, CHAF1A exists in a chromatin-remodeling complex WINAC, which coactivates ligand-induced transactivation function of the vitamin D receptor [PMID:12837248]. CHAF1A protein exists some phosphorylation sites, which may affect its theoretical molecular weight when tested. And a 150 kDa band was recognized (PMID:27445493).

## Notable Publications

Author	Pubmed ID	Journal	Application
Nasim A Begum	22843687	J Biol Chem	WB
Takashi Ishiuchi	33169018	Nat Struct Mol Biol	WB
Xiancai Ma	33739466	EMBO J	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:

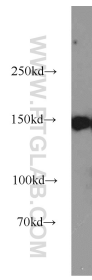
T: 4006900926

E: Proteintech-CN@ptglab.com

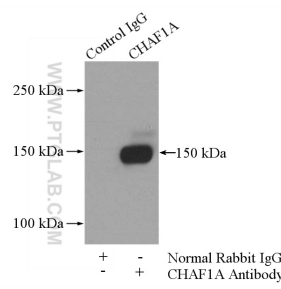
W: ptgcn.com

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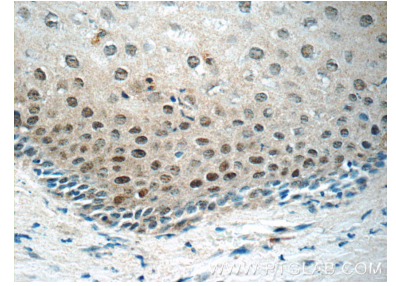
## Selected Validation Data



Jurkat cells were subjected to SDS PAGE followed by western blot with 17037-1-AP (CHAF1A antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



IP result of anti-CHAF1A (IP:17037-1-AP, 4 $\mu$ g; Detection:17037-1-AP 1:1000) with Jurkat cells lysate 2400 $\mu$ g.



Immunohistochemical analysis of paraffin-embedded human cervix tissue slide using 17037-1-AP (CHAF1A Antibody) at dilution of 1:50 (under 40 $\times$  lens).