



## Anti-HP1 $\alpha$ /CBX5 antibody (rabbit), affinity purified

### BACKGROUND

Heterochromatin protein 1 (HP1) is a major component of heterochromatin and plays a role in assembly of various proteins on chromatin and gene silencing. The HP1 family is evolutionally conserved, with members in fungi, plants and animals but not prokaryotes, and there are multiple members within the same species. The HP1 family proteins are encoded by a class of genes known as the chromobox (CBX) genes. In humans, HP1 $\alpha$  is encoded by the *Chromobox homolog 5* (CBX5) gene located on chromosome 12q13.13. HP1 $\alpha$  has been observed to interact directly or indirectly with several non-histone proteins with a wide variety of functions (1).

The product is prepared by immunizing rabbit with the synthetic peptide **CEDAENKEKETAKS** corresponding to the amino acid sequence 179-191 of human HP1 $\alpha$  and purified by affinity purification with the peptide. The antiserum was prepared by the direction of Prof. T. Haraguchi.

<b>Product type</b>	Primary antibodies
<b>Host</b>	Rabbit
<b>Source</b>	
<b>Form</b>	Liquid Affinity purified IgG 0.37 mg/ml in 0.12 M sodium phosphate buffer (pH 7.4), 50% glycerol, sterilized by filtration, azide free
<b>Volume</b>	50 $\mu$ g
<b>Concentration</b>	
<b>Specificity</b>	HP1 $\alpha$ /CBX5
<b>Antigen</b>	synthetic peptide CEDAENKEKETAKS corresponding to the amino acid sequence 179-191 of human HP1 $\alpha$
<b>Isotype</b>	IgG

**Application notes** WB, IF

### Recommended use

### Recommended dilutions

Western blotting: 1/1,000~1/3,000 (Fig. 1)

Immunofluorescence staining: 1/200~ 1/1,000

Optimal dilutions/concentrations should be determined by the end user.

**Data Link:** UniProtKB/Swiss-Prot [P45973](#) (CBX5\_HUMAN)

### Staining Pattern

**Cross reactivity** Human. Not tested with other species.

**Storage** -20°C (long period, -70°C)

### References

- 1) Lomberk G *et al* "The Heterochromatin Protein 1 family" *Genome Biol* **7**: 228 Review (2006) PMID: [17224041](#)
- 2) Kametaka A *et al* "Interaction of the chromatin compaction-inducing domain (LR domain) of Ki-67 antigen with HP1 proteins" *Genes Cells* **7**: 1231-1242 (2002) PMID: [12485163](#)
- 3) Wang F *et al* "The assembly and maintenance of hetero-chromatin initiated by transgene repeats are independent of the RNA interference pathway in mammalian cells" *Mol Cell Biol* **26**: 4028-4040 (2006) PMID: [16705157](#)

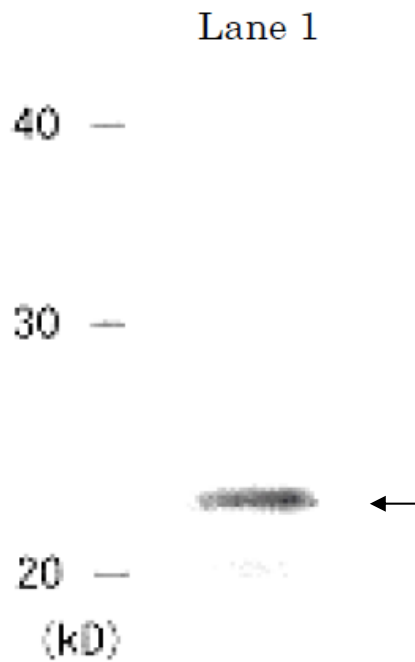


Fig. Detection of HP1 $\alpha$  protein by Western blotting.  
Lane 1: Crude extract of MCF7 cells  
The antiserum was diluted 1,000 fold before use.

**Related Products**

BAM-70-223-EX	Anti-HP1 $\beta$ antibody
BAM-70-225-EX	Anti-HP1 $\gamma$ antibody

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[Outside Japan] Phone : +81-3-5632-9617 [国内連絡先] Phone : +81-3-5632-9610  
FAX : +81-3-5632-9618 FAX : +81-3-5632-9619