

Anti-HP1a/CBX5 antibody (rabbit), affinity purified

70-221 50 ug

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 α is encoded by the *Chromobox homolog 5* (CBX5) gene located on chromosome 12q13.13. HP1 α 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 HP1a and purified by affinity purification with the peptide. The antiserum was prepared by the direction of Prof. T. Haraguchi.

Applications

- 1) Western blotting (1/1,000~1/3,000) (Fig.1)
- 2) Immunofluorescence staining (1/200~ 1/1,000)

Reactivity: Human. Not tested with other species.

Form: Affinity purified IgG 0.37 mg/ml in 0.12 M sodium phosphate buffer (pH 7.4), 50% glycerol, sterilized by filtration, azide free

Storage: -20° C (long period, -70° C)

Data Link UniProtKB/Swiss-Prot P45973 (CBX5_HUMAN)		Lane 1	
	40 —		
References			
1. Lomberk G et al "The Heterochromatin Protein 1 family"	30 —		
Genome Biol 7 : 228 Review (2006) PMID: <u>17224041</u>			
2. Kametaka A et al "Interaction of the chromatin compaction-			
inducing domain (LR domain) of Ki-67 antigen with HP1	20 — (kD)	CONSTRUCT	<i>~</i>
proteins" <i>Genes Cells</i> 7 : 1231-1242 (2002) PMID: <u>12485163</u>			
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: <u>16705157</u> Fig. Detection of HP1 α protein by Western blotting.

Lane 1: Crude extract of MCF7 cells The antiserum was diluted 1,000 fold before use.

Related product: #<u>70-223</u> Anti-HP1 β antibody, #<u>70-225</u> Anti-HP1 γ antibody

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