

## Anti-HP1 $\gamma$ /CBX3 antibody (rabbit), ChIP grade

70-225 100 ug

Heterochromatin protein 1 (HP1) is a major component of heterochromatin which 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 $\gamma$  is encoded by the *Chromobox homolog 3* (CBX3) gene. HP1 $\gamma$  has been observed to interact directly or indirectly with several non-histone proteins with a wide variety of functions (Ref 1).

The product is prepared by immunizing rabbit with the synthetic peptide **WHSCPEDEAQ-C** corresponding to the C-terminal sequence of human HP1 $\gamma$  (Ref 2, 3) and purified by affinity purification with the peptide. The antiserum preparation has been directed by Prof. T. Haraguchi.

### Applications:

- 1) Western blotting (1/2,000~1/10,000) (Fig. 2 & Ref. 2)
- 2) Immunofluorescence staining (Ref. 2 & 3)
- 3) Chromatin immunoprecipitation (ChIP) (Ref. 3)

**Reactivity:** Human and hamster. Expected to react with chicken, Xenopus, Drosophila, and zebra fish orthologs due to the sequence identity of the immunogen.

**Form:** Affinity purified IgG, 0.75 mg/ml in 0.12 M sodium phosphate buffer (pH 7.4), 50% glycerol, filter-sterilized, azide free

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

**Data Link:** UniProtKB/Swiss-Prot [Q13185](#) (CBX3\_HUMAN)

**References:** This product was described and used in Ref 2 and 3

1. Lomber 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 heterochromatin initiated by transgene repeats are independent of the RNA interference pathway in mammalian cells" *Mol Cell Biol* 26: 4028-4040 (2006) PMID: [16705157](#)

**Related product:** # [70-221](#) Anti-HP1 $\alpha$  antibody,  
# [70-223](#) Anti-HP1 $\beta$  antibody

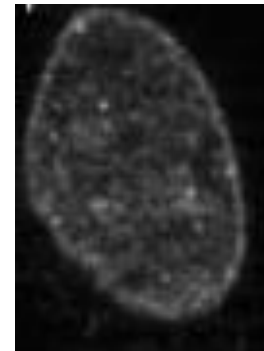
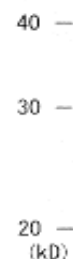


Fig. 1 Immunofluorescent staining of HP1 $\gamma$  in Baby Hamster Kidney cells with this antibody.

Cells were fixed with para-formaldehyde. The second antibody was Alexa Fluor 594-conjugated goat anti-rabbit IgG antibody.



40 —  
30 —  
20 —  
(kD)

Fig. 2 Identification of HP1 $\gamma$  in crude cell extract by Western blotting with this antibody.

Sample: Baby Hamster Kidney cells