

Anti-HP1 γ /CBX3 antibody, rabbit polyclonal, ChIP grade

Product code	70-225
Size	50 μ g
Storage	-20°C
Concentration	1.0 mg/ml
Buffer	PBS- with 50% glycerol
Purity	Purified IgG fraction with protein A from rabbit antiserum.
Immunogen	Synthetic peptide WHSCPEDEAQ-C to the C-terminal sequence of human HP1 γ (Ref 2, 3)
Isotype	Rabbit IgG
Reactivity	Human and hamster. Expected to react with chicken, Xenopus, Drosophila, and zebra fish orthologs due to the sequence identity of the immunogen.
Special notes	N/A
Application	<ol style="list-style-type: none"> 1. Western blotting (1/1,000~1/10,000) (Fig. 1 & Ref. 2) 2. Immunofluorescence staining (Fig.2, Ref. 2 & 3) 3. Chromatin immunoprecipitation (ChIP) (Ref. 3)
Background	<p>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, HP1γ is encoded by the Chromobox homolog 3 (CBX3) gene. HP1γ has been observed to interact directly or indirectly with several non-histone proteins with a wide variety of functions (Ref 1).</p>
Data Link	UniProtKB Q13185 (CBX3_HUMAN)
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	

Data Images: 70-225 Anti- HP1 γ /CBX3 antibody, rabbit polyclonal, ChIP grade

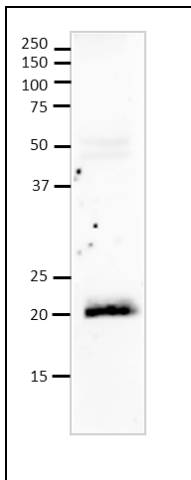


Fig. 1 Western blotting of HeLa whole cell lysate

20 μ g of HeLa whole cell lysate was run on SDS-PAGE (12.5% gel)

anti-HP1 γ antibody was used at 1 μ g/ml.

Identification of HP1 γ in crude cell extract by Western blotting with this antibody.

Second antibody (goat anti-rabbit IgG antibody, HRP-conjugated, ab205718) was used at 1/10,000 dilution.

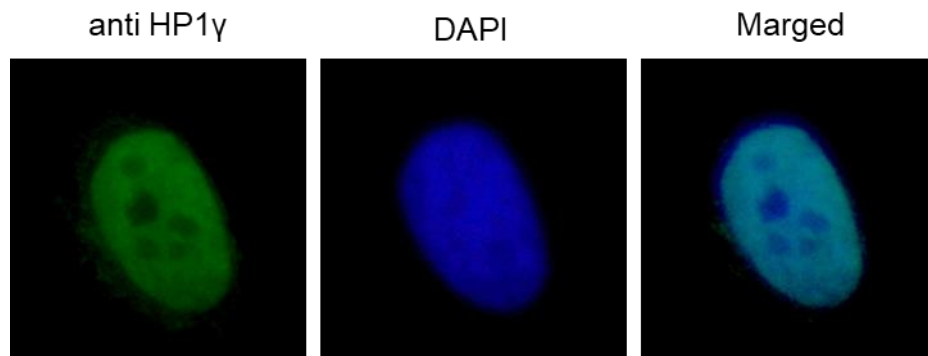


Fig.2 Immunofluorescence staining of HP1 γ protein in HeLa cells with anti- HP1 γ antibody.

HeLa cells were fixed with 4%PFA and permeabilized with 0.25% TritonX 100 and reacted with anti-HP1 γ antibody at 1 μ g/ml. As the second antibody, anti-rabbit IgG antibody conjugated with Alexa Fluor 488 (ab150077, Abcam) was used at 1/1,000 dilution. DNA was stained with 1.0 μ g/mL DAPI in TBS.

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

1. Lomberk G *et al* "The Heterochromatin Protein 1 family" *Genome Biol* 7: 228 Review (2006) PMID: [17224041](https://pubmed.ncbi.nlm.nih.gov/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](https://pubmed.ncbi.nlm.nih.gov/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](https://pubmed.ncbi.nlm.nih.gov/16705157/)

Related products

70-221 Anti-HP1 α /CBX5 antibody, rabbit polyclonal

70-223 Anti-HP1 β /CBX1 antibody, rabbit polyclonal