

## HP1 $\alpha$ , $\beta$ & $\gamma$ antibody

Cat. No. C15410071

Type: Polyclonal	Specificity: Human, mouse: positive. Other species: not tested
Size: 50 $\mu$ g	Isotype: NA
Concentration: 2.0 $\mu$ g/ $\mu$ l	Host: Rabbit
Lot No.: 001	Purity: Protein G purified polyclonal antibody
Storage buffer: PBS containing 0.05% azide and 0.05% ProClin 300	Storage conditions: Store at -20°C; for long storage, store at -80°C. Avoid multiple freeze-thaw cycles.
Precautions: This product is for research use only. Not for use in diagnostic or therapeutic procedures.	

Last Data Sheet Update: September 8, 2020

### Description

Alternative names: **CBX5, 1, 3**

Polyclonal antibody raised in rabbit against human HP1  $\beta$  (Heterochromatin protein 1 homolog beta), using the full length recombinant GST tagged protein. The antibody also recognizes the  $\alpha$  and  $\gamma$  isoforms.

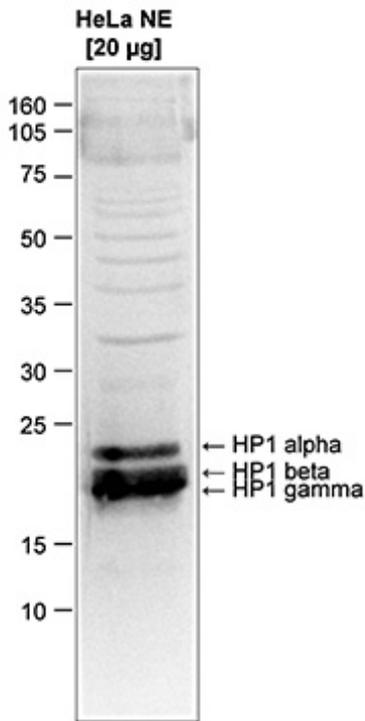
### Applications

Applications	Suggested dilution	References
Western Blotting	1:1,000	Fig 1
Immunofluorescence	1:500	Fig 2

### Target Description

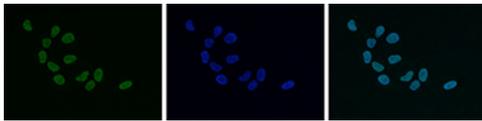
HP1 alpha, beta and gamma (UniProt/Swiss-Prot entry P45973, P83916 and Q13185) are components of heterochromatin. They recognize and bind histone H3 tails methylated at 'Lys-9', leading to epigenetic repression of transcription. HP1 alpha, beta and gamma also interact with lamin B receptor (LBR), thereby contributing to the association of heterochromatin with the inner nuclear membrane.

**Validation Data**



**Figure 1. Western blot analysis using the Diagenode antibody directed against HP1α, β and γ**

Western blot was performed on nuclear extracts from HeLa cells (20 µg) with the Diagenode antibody against human HP1α, β and γ (Cat. No. C15410071) diluted 1:1,000 in TBS-Tween containing 5% skimmed milk (Figure 1). The molecular weight marker (in kDa) is shown on the left; the expected location of HP1α, HP1β and HP1γ is indicated on the right.



**Figure 2. Immunofluorescence using the Diagenode antibody directed against HP1α, β and γ**

HeLa cells were stained with the Diagenode antibody against HP1α, β and γ (Cat. No. C15410071) and with DAPI. Cells were fixed with 4% formaldehyde for 10' and blocked with PBS/TX-100 containing 5% normal goat serum and 1% BSA. The cells were immunofluorescently labelled with the HP1α, β and γ antibody (left) diluted 1:500 in blocking solution followed by an anti-rabbit antibody conjugated to Alexa488. The middle panel shows staining of the nuclei with DAPI. A merge of the two stainings is shown on the right.