

## HP1 $\alpha$ polyclonal antibody

**Other names:** CBX5, HP1A

**Cat. No.** C15410070 (pAb-070-050)

**Type:** Polyclonal

**Source:** Rabbit

**Lot #:** 001

**Size:** 50  $\mu$ g/ 25  $\mu$ l

**Concentration:** 2  $\mu$ g/ $\mu$ l

**Specificity:** Human: positive - Other species: not tested.

**Purity:** Protein G purified polyclonal antibody in PBS containing 0.05% azide and 0.05% ProClin 300.

**Storage:** 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.

**Description:** Polyclonal antibody raised in rabbit against human HP1 $\alpha$  (Heterochromatin protein 1 homolog alpha), using the full length recombinant GST tagged protein.

### Applications

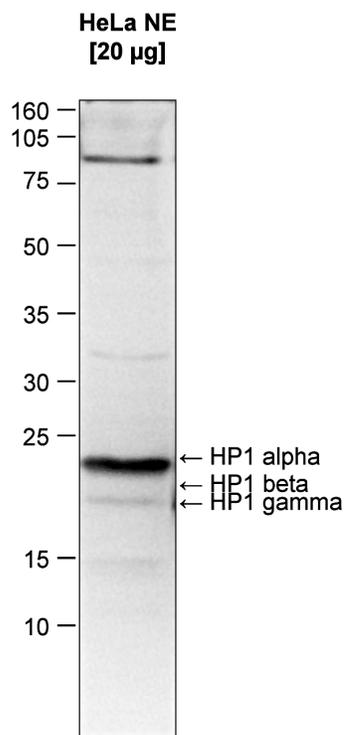
	Suggested dilution	References
Western blotting	1:1,000	Fig 1
Immunofluorescence	1:500	Fig 2

\* Please note that the optimal antibody amount per IP should be determined by the end-user. We recommend testing 1-5  $\mu$ g per IP.

### Target description

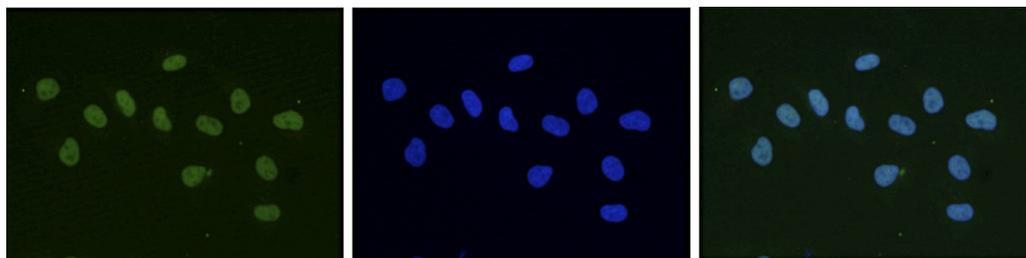
HP1 alpha (UniProt/Swiss-Prot entry P45973) is a component of heterochromatin. It recognizes and binds to histone H3 tails methylated at 'Lys-9', leading to epigenetic repression of transcription. HP1 alpha may also interact with lamin B receptor (LBR), thereby contributing to the association of the heterochromatin with the inner nuclear membrane. Further, HP1 alpha is involved in the formation of a functional kinetochore through interaction with MIS12 complex proteins.

## Results



**Figure 1. Western blot analysis using the Diagenode antibody directed against HP1α**

Western blot was performed on nuclear extracts from HeLa cells (20 µg) with the Diagenode antibody against human HP1α (Cat. No. C15410070), 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. The western blot analysis clearly demonstrates that the HP1α antibody specifically recognizes HP1α and not HP1β and HP1γ.



**Figure 2. Immunofluorescence using the Diagenode antibody directed against HP1α**

HeLa cells were stained with the Diagenode antibody against HP1α (Cat. No. C15410070) 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 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.

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