

**Anti-HP1 alpha Antibody**  
**Rabbit polyclonal antibody to HP1 alpha**  
**Catalog # AP60922****Specification**

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**Anti-HP1 alpha Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P45973</a>
Other Accession	<a href="#">Q61686</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	22225

**Anti-HP1 alpha Antibody - Additional Information****Gene ID** 23468**Other Names**

HP1A; Chromobox protein homolog 5; Antigen p25; Heterochromatin protein 1 homolog alpha; HP1 alpha

**Target/Specificity**

Recognizes endogenous levels of HP1 alpha protein.

**Dilution**

WB~~WB (1/500 - 1/1000), IH (1/50 - 1/100)

IHC~~1:100~500

**Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

**Storage**

Store at -20 °C.Stable for 12 months from date of receipt

**Anti-HP1 alpha Antibody - Protein Information****Name** CBX5**Synonyms** HP1A**Function**

Component of heterochromatin that recognizes and binds histone H3 tails methylated at 'Lys-9' (H3K9me), leading to epigenetic repression. In contrast, it is excluded from chromatin when 'Tyr-41' of histone H3 is phosphorylated (H3Y41ph) ([PubMed:<a href="http://www.uniprot.org/citations/19783980" target="\\_blank">19783980</a>](http://www.uniprot.org/citations/19783980)). May contribute to the association of heterochromatin with the inner nuclear membrane by interactions

with the lamin-B receptor (LBR) (PubMed:<a href="http://www.uniprot.org/citations/19783980" target="\_blank">19783980</a>). Involved in the formation of kinetochore through interaction with the MIS12 complex subunit NSL1 (PubMed:<a href="http://www.uniprot.org/citations/19783980" target="\_blank">19783980</a>, PubMed:<a href="http://www.uniprot.org/citations/20231385" target="\_blank">20231385</a>). Required for the formation of the inner centromere (PubMed:<a href="http://www.uniprot.org/citations/20231385" target="\_blank">20231385</a>).

#### Cellular Location

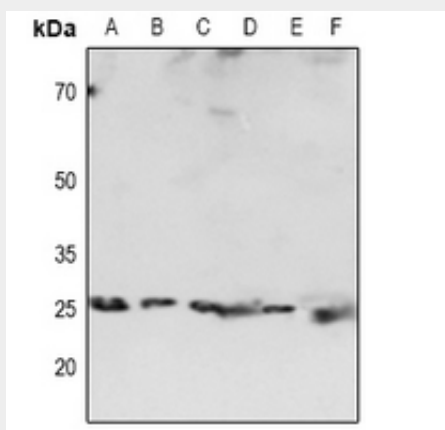
Nucleus. Chromosome. Chromosome, centromere. Note=Colocalizes with HNRNPU in the nucleus (PubMed:19617346). Component of centromeric and pericentromeric heterochromatin. Associates with chromosomes during mitosis. Associates specifically with chromatin during metaphase and anaphase (PubMed:19617346). Localizes to sites of DNA damage (PubMed:28977666)

#### Anti-HP1 alpha Antibody - Protocols

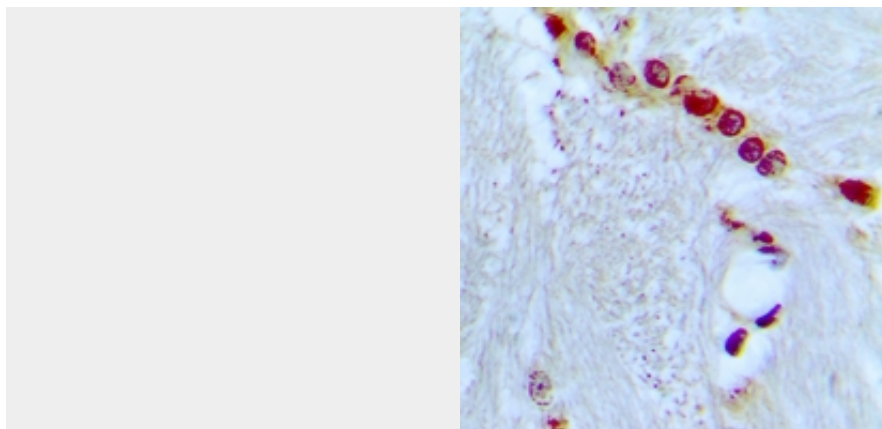
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Anti-HP1 alpha Antibody - Images



Western blot analysis of HP1 alpha expression in Hela (A), PC3 (B), THP1 (C), mouse heart (D), mouse brain (E), rat heart (F) whole cell lysates.



Immunohistochemical analysis of HP1 alpha staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

#### **Anti-HP1 alpha Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human HP1 alpha. The exact sequence is proprietary.