


## Product datasheet

# Anti-HP1 alpha antibody ab77256

★★★★☆ 12 Abreviews 26 References 4 Images

### Overview

<b>Product name</b>	Anti-HP1 alpha antibody
<b>Description</b>	Goat polyclonal to HP1 alpha
<b>Host species</b>	Goat
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human <b>Predicted to work with:</b> Rat, Cow, Dog, Rhesus monkey, Chinese hamster 
<b>Immunogen</b>	Synthetic peptide: C-NKRKSNFNSADDIK , corresponding to internal sequence amino acids 88-102 of Human HP1 alpha (NP_036249.1). <a href="#">Run BLAST with</a> <a href="#">Run BLAST with</a>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 0.5% BSA, 0.5% Tris buffered saline
<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	ab77256 is purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunising peptide.
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

### Applications

Our [Abpromise guarantee](#) covers the use of **ab77256** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use a concentration of 2 - 3 µg/ml.
WB	★★★★☆	Use a concentration of 0.03 - 0.1 µg/ml. Detects a band of approximately 22 kDa (predicted molecular weight: 22 kDa). 1 hour primary incubation is recommended for this product.

## Target

### 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). Can interact with lamin-B receptor (LBR). This interaction can contribute to the association of the heterochromatin with the inner nuclear membrane. Involved in the formation of functional kinetochore through interaction with MIS12 complex proteins.

### Sequence similarities

Contains 2 chromo domains.

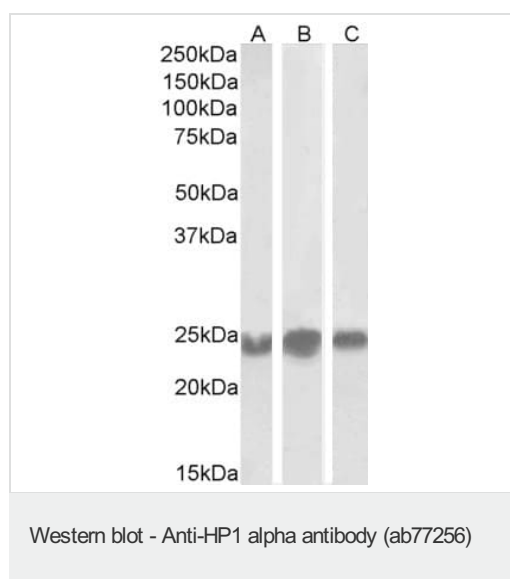
### Post-translational modifications

Phosphorylation of HP1 and LBR may be responsible for some of the alterations in chromatin organization and nuclear structure which occur at various times during the cell cycle (By similarity). Phosphorylated during interphase and possibly hyper-phosphorylated during mitosis. Ubiquitinated.

### Cellular localization

Nucleus. Chromosome. Chromosome > centromere. Component of centromeric and pericentromeric heterochromatin. Associates with chromosomes during mitosis. Associates specifically with chromatin during metaphase and anaphase.

## Images



**All lanes :** Anti-HP1 alpha antibody (ab77256) at 0.3 µg/ml

**Lane 1 :** A431 cell line lysates in RIPA buffer

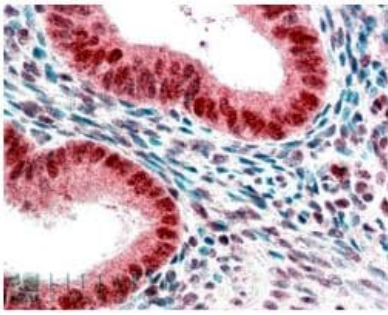
**Lane 2 :** HeLa cell line lysates in RIPA buffer

**Lane 3 :** NIH3T3 cell line lysates in RIPA buffer

Lysates/proteins at 35 µg per lane.

**Predicted band size:** 22 kDa

Primary incubation was 1 hour. Detected by chemiluminescence.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HP1 alpha antibody (ab77256)

ab77256 at 2.5 $\mu$ g/ml staining HP1 alpha in human uterus tissue section by Immunohistochemistry (Formalin/ PFA fixed paraffin-embedded sections). Tissue underwent antigen retrieval in steam with citrate buffer (pH 6.0). The AP-staining procedure was used for detection.



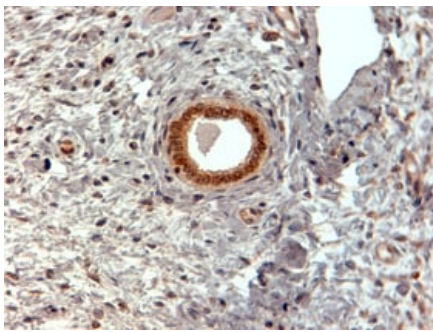
Western blot - Anti-HP1 alpha antibody (ab77256)

Anti-HP1 alpha antibody (ab77256) at 0.03  $\mu$ g/ml + HeLa lysate in RIPA buffer at 35  $\mu$ g

**Predicted band size:** 22 kDa

**Observed band size:** 22 kDa

Primary incubation was 1 hour. Detected by chemiluminescence.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HP1 alpha antibody (ab77256)

ab77256 (2 $\mu$ g/ml) staining of paraffin embedded Human Uterus. Steamed antigen retrieval with citrate buffer pH 6, HRP-staining.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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