

Product datasheet

Anti-HP1 alpha antibody [3A11F8] ab234085

5 Images

Overview

Product name	Anti-HP1 alpha antibody [3A11F8]
Description	Mouse monoclonal [3A11F8] to HP1 alpha
Host species	Mouse
Tested applications	Suitable for: WB, Flow Cyt, ICC/IF
Species reactivity	Reacts with: Mouse, Human, Recombinant fragment
Immunogen	Recombinant full length protein corresponding to Human HP1 alpha aa 1 to the C-terminus. Expressed in E. coli. Database link: P45973

 [Run BLAST with](#)

 [Run BLAST with](#)

Positive control	WB: HeLa, NIH/3T3, K562, MCF7, Jurkat and A431 cell lysate; Recombinant human HP1 alpha (amino acids: 1-191) protein; HP1 alpha (amino acids: 1-191)-hlgGfc transfected HEK-293 cell lysate. ICC/IF: HeLa cells. Flow Cytometry: HeLa cells.
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General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.05% Sodium azide Constituent: PBS
Purity	Protein G purified
Purification notes	Purified from tissue culture supernatant.
Clonality	Monoclonal
Clone number	3A11F8

Isotype

IgG1

Applications

The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab234085 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
WB		1/100 - 1/500. Predicted molecular weight: 22 kDa.
Flow Cyt		1/200 - 1/400.
ICC/IF		1/200 - 1/1000.

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.

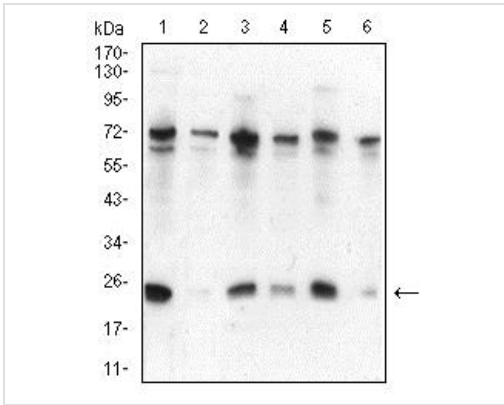
Post-translational modifications

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



Western blot - Anti-HP1 alpha antibody [3A11F8] (ab234085)

All lanes : Anti-HP1 alpha antibody [3A11F8] (ab234085) at 1/100 dilution

Lane 1 : HeLa (human epithelial cell line from cervix adenocarcinoma) cell lysate

Lane 2 : NIH/3T3 (mouse embryo fibroblast cell line) cell lysate

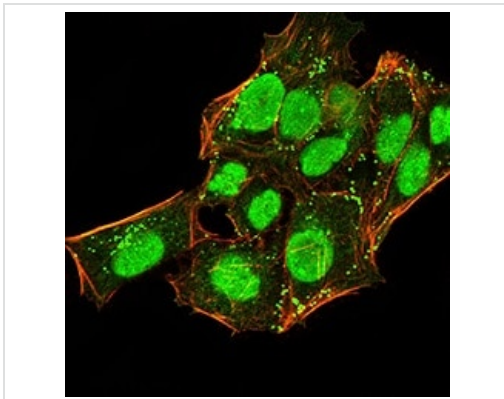
Lane 3 : K562 (human chronic myelogenous leukemia cell line from bone marrow) cell lysate

Lane 4 : MCF7 (human breast adenocarcinoma cell line) cell lysate

Lane 5 : Jurkat (human T cell leukemia cell line from peripheral blood) cell lysate

Lane 6 : A431 (human epidermoid carcinoma cell line) cell lysate

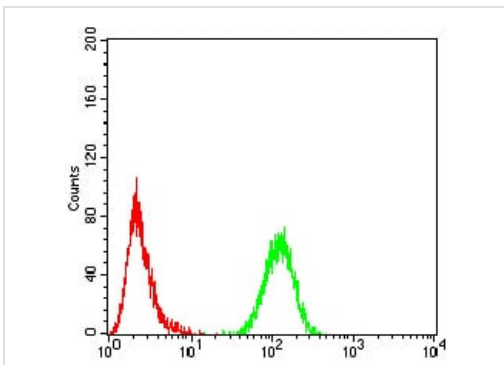
Predicted band size: 22 kDa



Immunocytochemistry/ Immunofluorescence - Anti-HP1 alpha antibody [3A11F8] (ab234085)

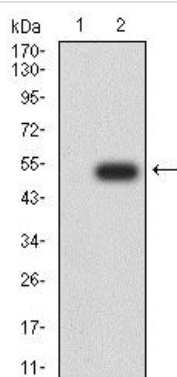
HeLa (human epithelial cell line from cervix adenocarcinoma) cells stained for HP1 alpha (green) using ab234085 at 1/200 dilution in ICC/IF.

Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with AlexaFluor[®]555-Phalloidin.



Flow Cytometry - Anti-HP1 alpha antibody [3A11F8] (ab234085)

Flow Cytometry analysis of HeLa (human epithelial cell line from cervix adenocarcinoma) cells, labeling HP1 alpha with ab234085 at 1/200 dilution (green) compared to a negative control (red).



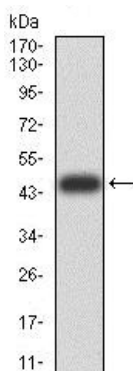
Western blot - Anti-HP1 alpha antibody [3A11F8] (ab234085)

All lanes : Anti-HP1 alpha antibody [3A11F8] (ab234085) at 1/100 dilution

Lane 1 : HEK-293 (human epithelial cell line from embryonic kidney) cell lysate

Lane 2 : HP1 alpha (amino acids: 1-191)-hlgGfc transfected HEK-293 cell lysate

Predicted band size: 22 kDa



Western blot - Anti-HP1 alpha antibody [3A11F8] (ab234085)

Anti-HP1 alpha antibody [3A11F8] (ab234085) at 1/100 dilution + Recombinant human HP1 alpha (amino acids: 1-191) protein

Predicted band size: 22 kDa

Expected recombinant MW is 48.2 kDa

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

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