

## DATASHEET

# HP1 alpha Mouse Monoclonal Antibody(C2581)

CAT. NO. AMA02193

### KEY FEATURES

Target	HP1 alpha	Source / Host	Mouse
Reactivity	Human, Mouse	Clonality	Monoclonal
Applications	WB, IF/ICC, FC	Conjugation	Unconjugated
Form / Buffer	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.	Storage	at-20°C

### BACKGROUND

Component of heterochromatin that recognizes and binds histone H3 tails methylated at 'Lys-9' (H3K9me), leading to epigenetic repression, leading to epigenetic repression. In contrast, it is excluded from chromatin when 'Tyr-41' of histone H3 is phosphorylated (H3Y41ph). Also recognizes and binds histone H1.4 methylated at 'Lys-26' (H1.4K26me). Excluded from chromatin when histone H1.4 is Simultaneously methylated at Lys-26 (H1.4K26me) and phosphorylated at Ser-27 (H1.4S27Ph). May contribute to the association of heterochromatin with the inner nuclear membrane by interactions with the lamin-B receptor (LBR). Involved in the formation of kinetochore through interaction with the MIS12 complex subunit NSL1. Required for the formation of the inner centromere.

### APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IF/ICC	1:100 - 1:500
FC	1:100 - 1:200

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

### PRODUCT OVERVIEW

Description	Mouse monoclonal to HP1 alpha
Specificity	Recognizes endogenous levels of HP1 alpha protein
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human HP1 alpha expressed in E. Coli
Purification	This antibody is purified through a protein G column.
Molecular Weight	Predicted: 22 kD; Observed: 24 kD
Form/Buffer	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	HP1A; Chromobox protein homolog 5; Antigen p25; Heterochromatin protein 1 homolog alpha; HP1 alpha
Gene Symbol	CBX5
Entrez Gene	23468(Human)
SwissProt	P45973(Human); Q61686(Mouse)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

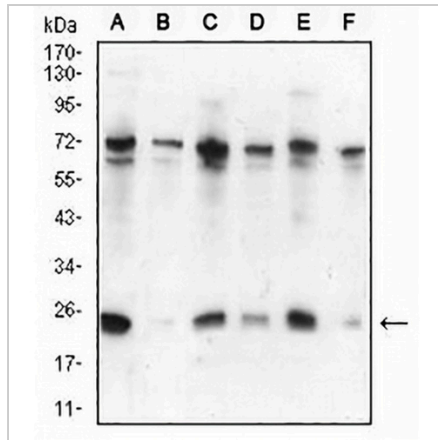
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

**DATASHEET**

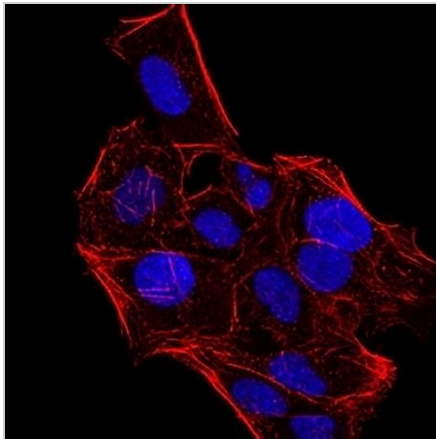
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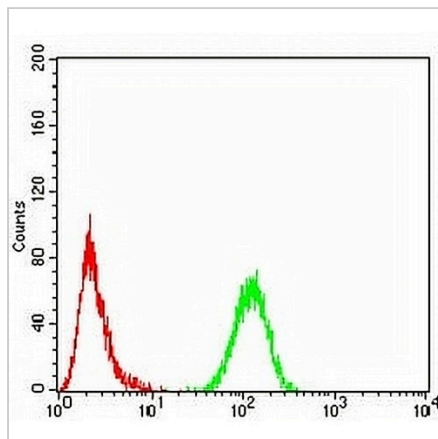
**DATA**



Western blot analysis of HP1 alpha expression in Hela (A), NIH/3T3 (B), K562 (C), MCF7 (D), Jurkat (E), A431 (F) whole cell lysates. (Predicted band size: 22 kD; Observed band size: 24 kD)



Immunofluorescent analysis of HP1 alpha staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).



Flow cytometric analysis of HeLa cells using Anti-HP1 alpha Antibody (green) and negative control (red).

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.