

DATASHEET

HP1 gamma Mouse Monoclonal Antibody(C3448)

CAT. NO. AMA03060

KEY FEATURES

Target	HP1 gamma	Source / Host	Mouse
Reactivity	Human, Mouse, Rat, Monkey, Hamster	Clonality	Monoclonal
Applications	WB, IHC, IF/ICC, IP	Conjugation	Unconjugated
Form / Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.	Storage	at-20°C

BACKGROUND

Component of heterochromatin, which recognizes and binds histone H3 tails methylated at 'Lys-9', leading to epigenetic repression. 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). Involved in the formation of functional kinetochore through interaction with MIS12 complex proteins. Contributes to the conversion of local chromatin to a heterochromatin-like repressive state through H3 'Lys-9' trimethylation, mediates the recruitment of the methyltransferases SUV39H1 and/or SUV39H2 by the PER complex to the E-box elements of the circadian target genes such as PER2 itself or PER1.

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
IHC	1:50 - 1:100
IF/ICC	1:50 - 1:100
IP	1:10 - 1:50

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

PRODUCT OVERVIEW

Description	Mouse monoclonal antibody to HP1 gamma
Specificity	Recognizes endogenous levels of HP1 gamma protein.
Antibody Type	Primary antibody
Immunogen	Purified recombinant human HP1-gamma protein fragments expressed in E.coli.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 21 kD; Observed: 21 kD
Form/Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
Alternative Names	Chromobox protein homolog 3; HECH; Heterochromatin protein 1 homolog gamma; HP1 gamma; Modifier 2 protein
Gene Symbol	CBX3
Entrez Gene	11335(Human)
SwissProt	Q13185(Human); P23198(Mouse)

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

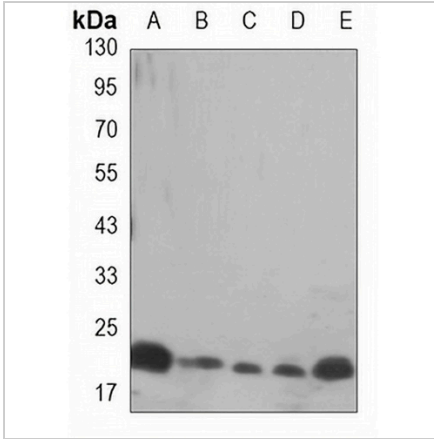
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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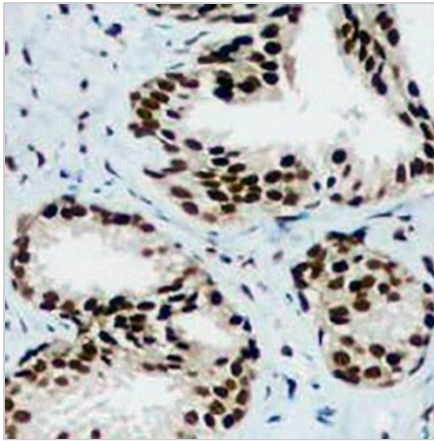
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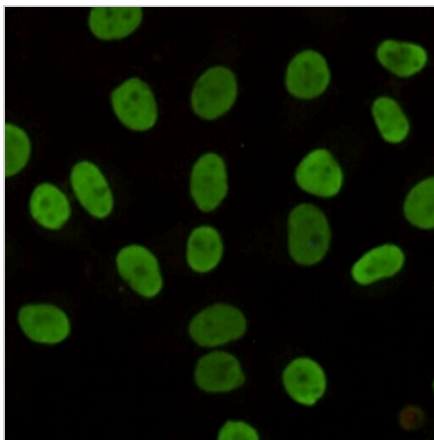
DATA



Western blot analysis of HP1 gamma expression in HeLa (A), NIH3T3 (B), C6 (C), COS7 (D), CHOK1 (E) whole cell lysates. (Predicted band size: 21 kD; Observed band size: 21 kD)



Immunohistochemical analysis of HP1 gamma staining in human prostate cancer 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.



Immunofluorescent analysis of HP1 gamma 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 a AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark.

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.