

# HP1-gamma Antibody

Purified Mouse Monoclonal Antibody (Mab)

Catalog # AP53280

## Product Information

Application	WB, ICC, IP, IHC
Primary Accession	<a href="#">Q13185</a>
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	20811

## Additional Information

Gene ID	11335
Other Names	CBX 3;CBX3 ;CBX3_HUMAN;Chromobox homolog 3 (HP1 gamma homolog, Drosophila);Chromobox homolog 3;Chromobox protein homolog 3 ;GAMMA; HECH;Heterochromatin like protein 1; Heterochromatin protein 1 homolog gamma;Heterochromatin protein HP1 gamma;HP1 gamma;HP1 gamma homolog;HP1Hs gamma;Modifier 2 protein.
Dilution	WB~~1:1000 ICC~~1:200 IP~~1:500 IHC~~1:100
Format	Purified mouse monoclonal antibody in PBS(pH 7.4) containing with 0.09% (W/V) sodium azide and 50% glycerol.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

## Protein Information

Name	CBX3
Function	Seems to be involved in transcriptional silencing in heterochromatin-like complexes. Recognizes and binds histone H3 tails methylated at 'Lys-9', leading to epigenetic repression. May contribute to the association of the heterochromatin with the inner nuclear membrane through its interaction with lamin B receptor (LBR). 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. Mediates the recruitment of NIPBL to sites of DNA damage at double-strand breaks (DSBs) (PubMed: <a href="#">28167679</a> ).

## Cellular Location

Nucleus. Note=Associates with euchromatin and is largely excluded from constitutive heterochromatin. May be associated with microtubules and mitotic poles during mitosis (Potential).

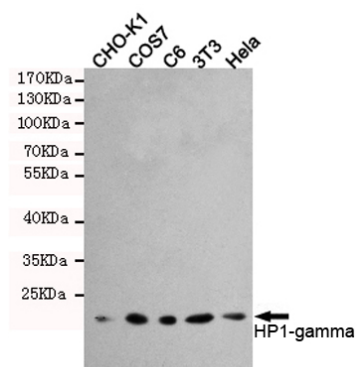
## Background

Seems to be involved in transcriptional silencing in heterochromatin-like complexes. Recognizes and binds histone H3 tails methylated at 'Lys-9', leading to epigenetic repression. May contribute to the association of the heterochromatin with the inner nuclear membrane through its interaction with lamin B receptor (LBR). 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.

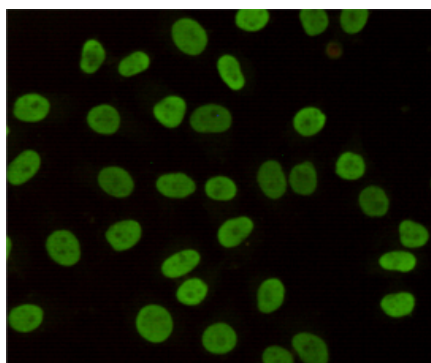
## References

Ye Q.,et al.J. Biol. Chem. 271:14653-14656(1996).  
Ye Q.,et al.Submitted (JAN-1997) to the EMBL/GenBank/DDBJ databases.  
Koike N.,et al.FEBS Lett. 467:17-21(2000).  
Chen J.H.,et al.Submitted (MAR-1999) to the EMBL/GenBank/DDBJ databases.  
Lubec G.,et al.Submitted (MAR-2007) to UniProtKB.

## Images

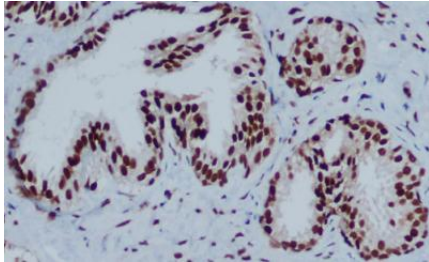
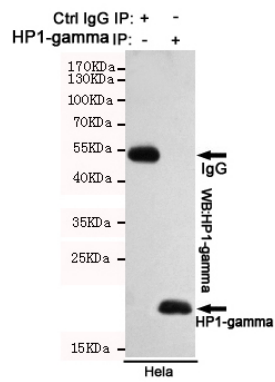


Western blot detection of HP1-gamma in HeLa,3T3,C6,COS7 and CHO-K1 cell lysates using HP1-gamma mouse mAb (1:1000 diluted).Predicted band size:22KDa.Observed band size:22KDa.



Immunocytochemistry staining of HeLa cells fixed with 4% Paraformaldehyde and using anti-HP1-gamma mouse mAb (dilution 1:200).

Immunoprecipitation analysis of HeLa cell lysates using HP1-gamma mouse mAb.



Immunohistochemical analysis of paraffin-embedded Prostate Cancer using HP1-gamma mouse mAb (1/200 dilution).Antigen retrieval was performed by pressure cooking in citrate buffer (pH 6.0).

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