

HP1-gamma Antibody

Purified Mouse Monoclonal Antibody (Mab) Catalog # AP53280

Specification

HP1-gamma Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB, ICC, IP, IHC <u>013185</u> Human, Mouse Mouse Monoclonal IgG1 22 KDa

HP1-gamma Antibody - 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 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.

Store at -20 °C.Stable for 12 months from date of receipt

HP1-gamma Antibody - 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:28167679).

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).

HP1-gamma Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

HP1-gamma Antibody - Images



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





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.



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).



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

HP1-gamma Antibody - Background

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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 mehtyltransferases SUV39H1 and/or SUV39H2 by the PER complex to the E-box elements of the circadian target genes such as PER2 itself or PER1.

HP1-gamma Antibody - 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.