

# HP-1y mouse Monoclonal Antibody(4F4)

Catalog # AP63829

## **Product Information**

**Application** WB, IHC-P **Primary Accession** 013185

Reactivity Human, Mouse, Rat

Host Mouse
Clonality Monoclonal
Calculated MW 20811

#### **Additional Information**

**Gene ID** 11335

Other Names Chromobox protein homolog 3 (HECH) (Heterochromatin protein 1 homolog

gamma) (HP1 gamma) (Modifier 2 protein)

**Dilution** WB~~WB 1:500-2000,IHC-p 1:50-300 IHC-P~~WB 1:500-2000,IHC-p 1:50-300

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

#### **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

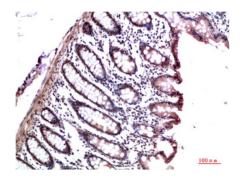
constitutive heterochromatin. May be associated with microtubules and

mitotic poles during mitosis (Potential).

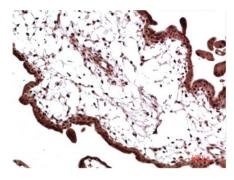
### **Background**

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. Mediates the recruitment of NIPBL to sites of DNA damage at double-strand breaks (DSBs) (PubMed:28167679).

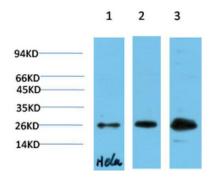
## **Images**



Immunohistochemical analysis of paraffin-embedded Human Colon Carcinoma Tissue using HP-1y Mouse mAb diluted at 1:200



Immunohistochemical analysis of paraffin-embedded Human Placenta Tissue using HP-1y Mouse mAb diluted at 1:200



Western blot analysis of 1) Hela Cell Lysate, 2)3T3 Cell Lysate, 3) PC12 Cell Lysate using HP-1y Mouse mAb diluted at 1:1000.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.