



# HP-1 $\gamma$ mouse Monoclonal Antibody(3B9)

<b>Catalog No</b>	YP-Ab-01175
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF
<b>Gene Name</b>	CBX3
<b>Protein Name</b>	Chromobox protein homolog 3 (HECH) (Heterochromatin protein 1 homolog gamma) (HP1 gamma) (Modifier 2 protein)
<b>Immunogen</b>	Recombinant Protein of HP-1 $\gamma$
<b>Specificity</b>	The antibody detects endogenous HP-1 $\gamma$ protein
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Monoclonal, Mouse
<b>Purification</b>	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-2000,IHC-p 1:50-300. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	$\geq 90\%$
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	Chromobox protein homolog 3 (HECH;Heterochromatin protein 1 homolog gamma;HP1 gamma;Modifier 2 protein)
<b>Observed Band</b>	24kD
<b>Cell Pathway</b>	Nucleus . Associates with euchromatin and is largely excluded from constitutive heterochromatin. May be associated with microtubules and mitotic poles during mitosis (Potential) .
<b>Tissue Specificity</b>	Bone marrow,Brain,Cajal-Retzius cell,Epithelium,Liver,Placenta,
<b>Function</b>	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.,PTM:Phosphorylated by PIM1. Phosphorylated during interphase and possibly hyper-phosphorylated during mitosis.,similarity:Contains 2 chromo domains.,subcellular location:Associates with euchromatin and is largely excluded from constitutive heterochromatin. May be associated with microtubules and mitotic poles during mitosis.,subunit:Binds directly to CHAF1A. Interacts with histone H3 methylated at 'Lys-9'. Part of the E2F6.com-1 complex in G0 phase composed of E2F



## Background

At the nuclear envelope, the nuclear lamina and heterochromatin are adjacent to the inner nuclear membrane. The protein encoded by this gene binds DNA and is a component of heterochromatin. This protein also can bind lamin B receptor, an integral membrane protein found in the inner nuclear membrane. The dual binding functions of the encoded protein may explain the association of heterochromatin with the inner nuclear membrane. This protein binds histone H3 tails methylated at Lys-9 sites. This protein is also recruited to sites of ultraviolet-induced DNA damage and double-strand breaks. Two transcript variants encoding the same protein but differing in the 5' UTR, have been found for this gene.[provided by RefSeq, Mar 2011],

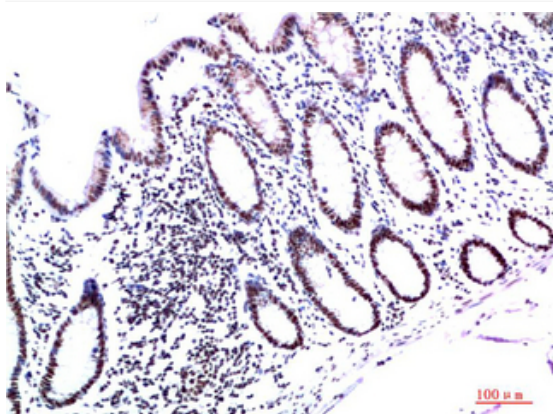
## matters needing attention

Avoid repeated freezing and thawing!

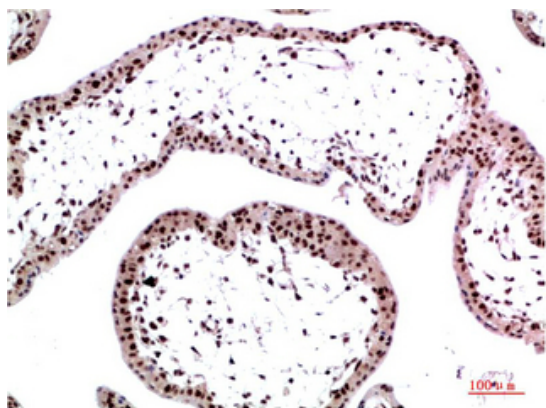
## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

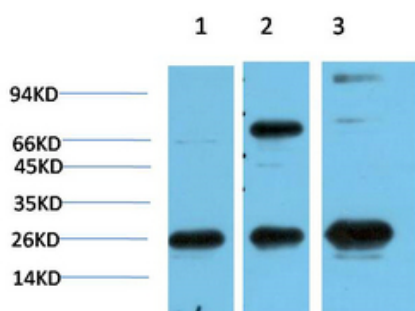
## Products Images



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



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



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