

# Anti-HP1 gamma/CBX3 Mouse mAb

Purified Recombinant Mouse Monoclonal Antibody

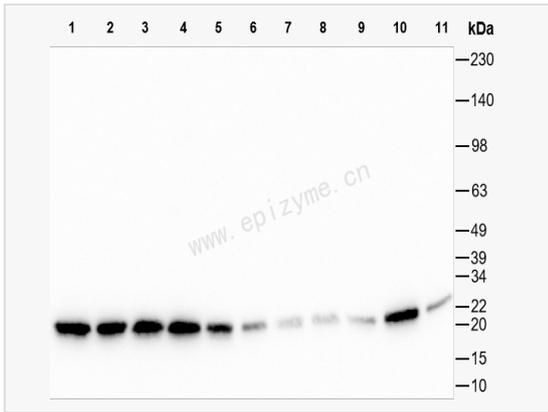
Catalog # M012167

## Product Information

Application	WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA
Reactivity	Human, Mouse (Cell), Rat
Dilution	WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Mouse
Clonality	Monoclonal
Clone No.	66L05L61
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant protein of human HP1 gamma
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-HP1 gamma/CBX3 Mouse mAb [66L05L61] is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

Synonyms	Chromobox protein homolog 3; HECH; Heterochromatin protein 1 homolog gamma; Modifier 2 protein; HP1 gamma; CBX3.
Calculated MW	Calculated MW: 21 kDa; Observed MW: 21 kDa
Uniprot ID	Q13185
Gene ID	11335
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]
Cellular Location	Nucleus Associates with euchromatin and is largely excluded from constitutive heterochromatin. May be associated with microtubules and mitotic poles during mitosis (Potential)



Western Blot - Anti-HP1 gamma/CBX3 Mouse mAb [66L05L61]

All lanes: M012167 at 1:1,000 dilution

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates

Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates

Lane 4: MCF-7 (human breast adenocarcinoma epithelial cell) whole cell lysates

Lane 5: 293T (Human embryonic kidney cell) whole cell lysates

Lane 6: U87 (Human malignant glioblastoma epithelial cells) whole cell lysates

Lane 7: Raw264.7 (Mouse mononuclear macrophage leukemia cell) whole cell lysates

Lane 8: Mouse brain whole tissue lysates

Lane 9: Mouse liver whole tissue lysates

Lane 10: PC-12 (Rat adrenal pheochromocytoma epithelial cell) whole cell lysates

Lane 11: Rat brain whole tissue lysates

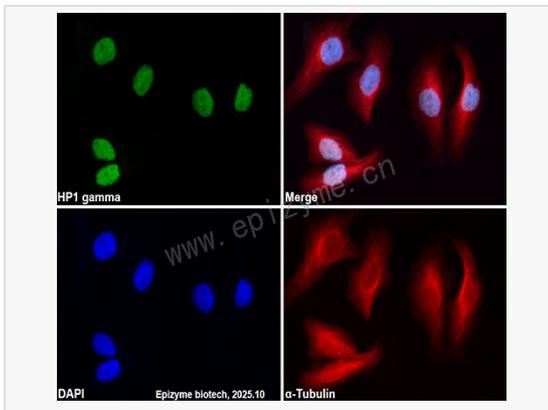
Lysates/proteins at 10 µg per lane.

Secondary antibody: Goat Anti-Mouse IgG(H+L), HRP Conjugated (Cat. No. LF101) at 1:5,000 dilution

Predicted band size: 21 kDa

Observed band size: 21 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-HP1 gamma/CBX3 Mouse mAb [66L05L61]

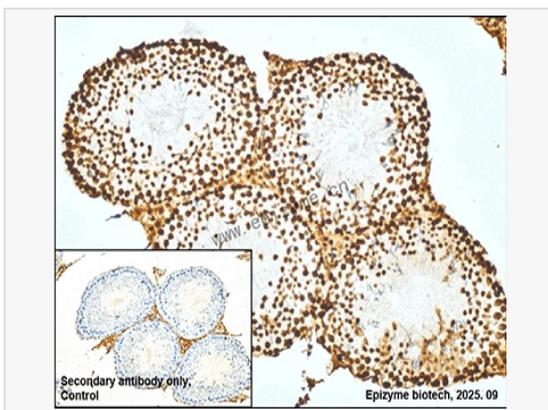
Sample: HeLa cells

The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.

Primary antibody: M012167 at 1:100 dilution and  $\alpha$ -tubulin Rabbit Monoclonal Antibody (Cat. No. LF213) at 1:100 dilution

Secondary antibody: Goat anti-Mouse (488) at 1:1,000 dilution (shown in green) and Goat anti-Rabbit (555) at 1:1,000 dilution (shown in red)

Nuclei were stained with DAPI (shown in blue).



Immunohistochemistry - Anti-HP1 gamma/CBX3 Mouse mAb [66L05L61]

Sample: Paraformaldehyde-fixed, paraffin embedded rat testis tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

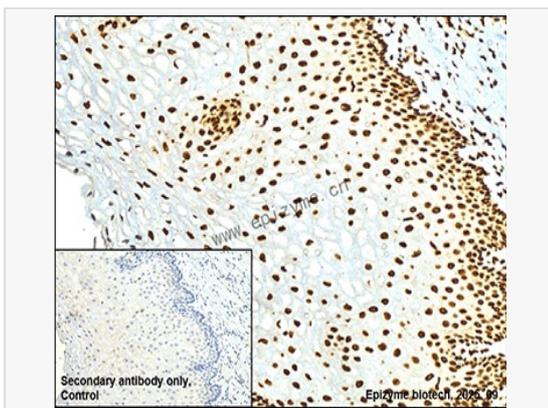
Primary antibody: M012167 at 1:200 dilution

Secondary antibody: Goat Anti-Mouse IgG (H+L), HRP conjugated at 1:1,000 dilution DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-HP1 gamma/CBX3 Mouse mAb [66L05L61]

Sample: Paraformaldehyde-fixed, paraffin embedded human cervical cancer tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

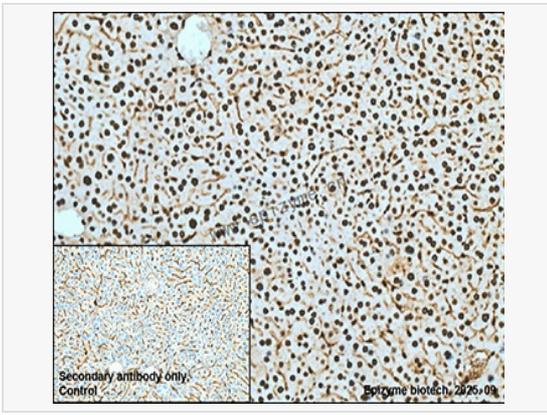
Primary antibody: M012167 at 1:200 dilution

Secondary antibody: Goat Anti-Mouse IgG (H+L), HRP conjugated at 1:1,000 dilution DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-HP1 gamma/CBX3 Mouse mAb [66L05L61]

Sample: Paraformaldehyde-fixed, paraffin embedded mouse liver tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: M012167 at 1:200 dilution

Secondary antibody: Goat Anti-Mouse IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.