

**Anti-HP1 gamma Rabbit Monoclonal Antibody**  
**Catalog # ABO14459****Specification**

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**Anti-HP1 gamma Rabbit Monoclonal Antibody - Product Information**

Application	WB, IHC, IP, FC
Primary Accession	<a href="#">Q13185</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-HP1 gamma Rabbit Monoclonal Antibody . Tested in WB, IHC, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

**Anti-HP1 gamma Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 11335

**Other Names**

Chromobox protein homolog 3, HECH, Heterochromatin protein 1 homolog gamma, HP1 gamma, Modifier 2 protein, CBX3

**Application Details**

WB 1:500-1:2000<br>IHC 1:50-1:200<br>IP 1:50<br>FC 1:100

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human HP1 gamma

**Purification**

Affinity-chromatography

**Storage**

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

**Anti-HP1 gamma Rabbit Monoclonal 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:<a href="http://www.uniprot.org/citations/28167679" target="\_blank">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).

#### Anti-HP1 gamma Rabbit Monoclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Anti-HP1 gamma Rabbit Monoclonal Antibody - Images

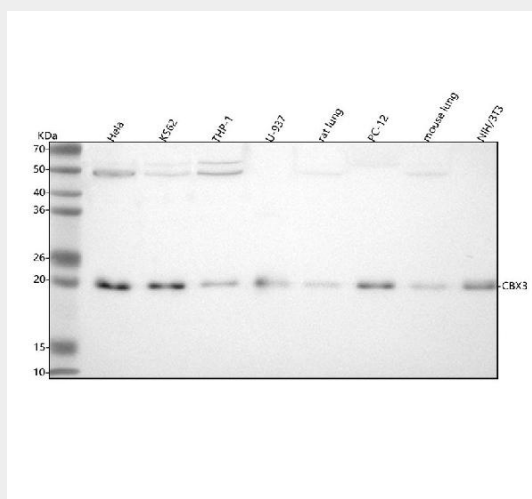


Figure 1. Western blot analysis of HP1 Gamma using anti-HP1 Gamma antibody (M01142-1). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HeLa whole cell lysates,  
Lane 2: human K562 whole cell lysates,  
Lane 3: human THP-1 whole cell lysates,  
Lane 4: human U-937 whole cell lysates,  
Lane 5: rat lung tissue lysates,

Lane 6: rat PC-12 whole cell lysates,  
Lane 7: mouse lung tissue lysates,  
Lane 8: mouse NIH/3T3 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-HP1 Gamma antigen affinity purified monoclonal antibody (Catalog # M01142-1) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for HP1 Gamma at approximately 21 kDa. The expected band size for HP1 Gamma is at 21 kDa.