
Product Name: HP1 γ Rabbit Polyclonal Antibody**Catalog #: APRab12188**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:20000-1:40000
Molecular Weight	22kDa

Antigen Information

Gene Name	CBX3
Alternative Names	CBX3; Chromobox protein homolog 3; HECH; Heterochromatin protein 1 homolog gamma; HP1 gamma; Modifier 2 protein
Gene ID	11335.0
SwissProt ID	Q13185
Immunogen	The antiserum was produced against synthesized peptide derived from human HP1 gamma. AA range:59-108

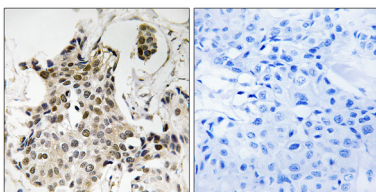
Background

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],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 E2F6, MGA, MAX, TFDP1, CBX3, BAT8, EUHMTASE1, RING1, RNF2, MBLR, L3MBTL2 and YAF2. Interacts with LBR, INCENP, TRIM28/TIF1B, SUV420H1, SUV420H2 and SP100. Interacts with TIF1A (By similarity). Interacts with MIS12 and C20orf127. Can interact directly with CBX5 via the chromoshadow domain.,

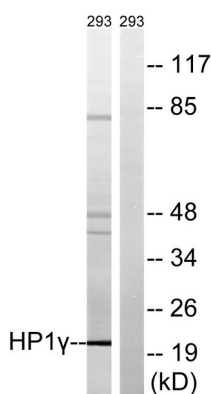
Research Area

Epigenetics and Nuclear Signaling

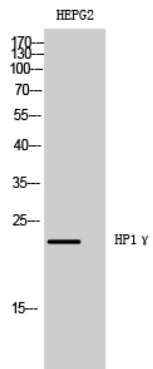
Image Data



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using HP1 gamma Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 293 cells, using HP1 gamma Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of HEPG2 cells using HP1 γ Polyclonal Antibody diluted at 1:500.