



HP1 γ Polyclonal Antibody

Catalog No	YP-Ab-01814
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	CBX3
Protein Name	Chromobox protein homolog 3
Immunogen	The antiserum was produced against synthesized peptide derived from human HP1 gamma. AA range:59-108
Specificity	HP1 γ Polyclonal Antibody detects endogenous levels of HP1 γ protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/40000.. IF 1:50-200
Concentration	1 mg/ml
Purity	\geq 90%
Storage Stability	-20°C/1 year
Synonyms	CBX3; Chromobox protein homolog 3; HECH; Heterochromatin protein 1 homolog gamma; HP1 gamma; Modifier 2 protein
Observed Band	22kD
Cell Pathway	Nucleus . Associates with euchromatin and is largely excluded from constitutive heterochromatin. May be associated with microtubules and mitotic poles during mitosis (Potential) .
Tissue Specificity	Bone marrow,Brain,Cajal-Retzius cell,Epithelium,Liver,Placenta,
Function	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],

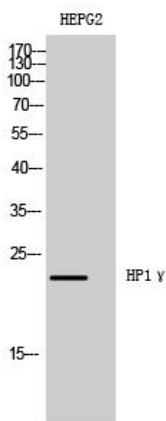
matters needing attention

Avoid repeated freezing and thawing!

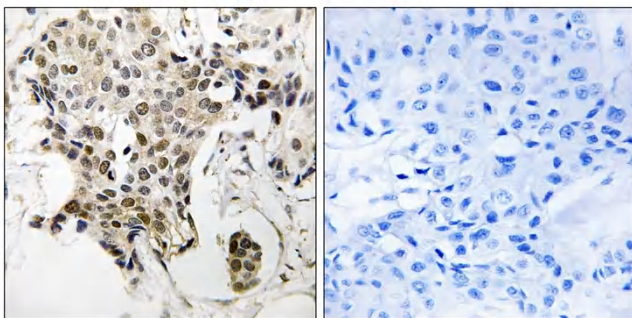
Usage suggestions

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

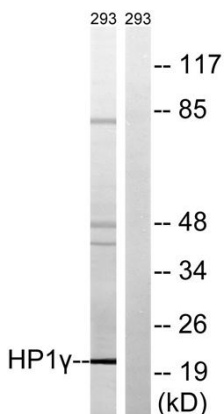
Products Images



Western Blot analysis of HEPG2 cells using HP1γ Polyclonal Antibody diluted at 1:500 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA).



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.