

For Research Use Only

# CBX5 Recombinant antibody

Catalog Number: 83258-6-RR



## Basic Information

<b>Catalog Number:</b> 83258-6-RR	<b>GenBank Accession Number:</b> BC006821	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1000 µg/ml	<b>GeneID (NCBI):</b> 23468	<b>CloneNo.:</b> 240145G12
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P45973	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IF/ICC 1:200-1:800
<b>Isotype:</b> IgG	<b>Full Name:</b> chromobox homolog 5 (HP1 alpha homolog, Drosophila)	
<b>Immunogen Catalog Number:</b> AG34810	<b>Calculated MW:</b> 191 aa, 22 kDa	
	<b>Observed MW:</b> 24 kDa	

## Applications

<b>Tested Applications:</b> WB, IF/ICC, ELISA	<b>Positive Controls:</b> WB : HeLa cells, HEK-293 cells, MCF-7 cells, Jurkat cells, A431 cells
<b>Species Specificity:</b> Human	<b>IF/ICC :</b> HepG2 cells,

## Background Information

Chromobox protein homolog 5 (CBX5), also named heterochromatin protein 1 alpha (HP1a), is a highly conserved nonhistone protein involved in heterochromatin formation and gene silencing in different species including humans. HP1a is a Component of heterochromatin that recognizes and binds histone H3 tails methylated at 'Lys-9' (H3K9me), leading to epigenetic repression. In contrast, it is excluded from chromatin when 'Tyr-41' of histone H3 is phosphorylated (H3Y41ph). It may interact with lamin-Breceptor. HP1a is involved in the formation of functional kinetochore through interaction with MIS12 complex proteins. Phosphorylation of HP1 and LBR during interphase mitosis may be responsible for some of the alterations in chromatin organization and nuclear structure which occur at various times during the cell cycle. The HP1a was expressed in nucleus and associates specifically with chromatin during metaphase and anaphase. Recent studies have shown that HP1a is present at many euchromatic sites and positively regulates euchromatic gene expression through RNA transcript association and interaction with hnRNPs in Drosophila (19798443).

## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

For technical support and original validation data for this product please contact:

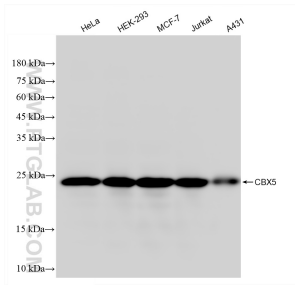
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

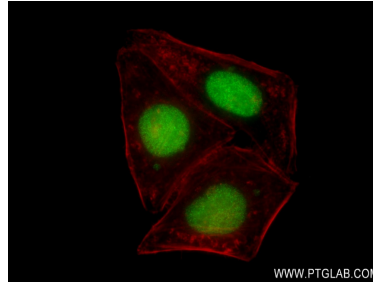
W: [ptgcn.com](http://ptgcn.com)

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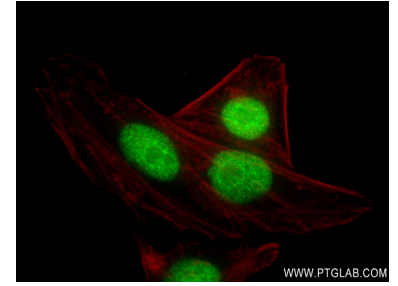
## Selected Validation Data



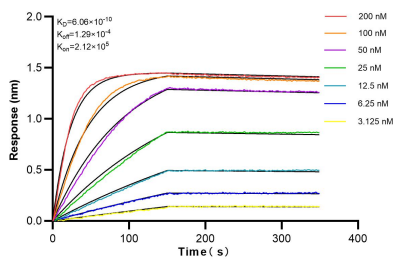
Various lysates were subjected to SDS PAGE followed by western blot with 83258-6-RR (CBX5 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using CBX5 antibody (83258-6-RR, Clone: 240145G12) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1), CL594-Phalloidin (red).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using CBX5 antibody (83258-6-RR, Clone: 240145G12) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1), CL594-Phalloidin (red).



Biolayer interferometry (BLI) kinetic assays of 83258-6-RR against Human CBX5 were performed. The affinity constant is 0.606 nM.