

For Research Use Only

# CBX5 Polyclonal antibody

Catalog Number: 31109-1-AP



## Basic Information

<b>Catalog Number:</b> 31109-1-AP	<b>GenBank Accession Number:</b> BC006821	<b>Purification Method:</b> Antigen affinity Purification
<b>Size:</b> 650 µg/ml	<b>GeneID (NCBI):</b> 23468	<b>Recommended Dilutions:</b> WB 1:2000-1:10000
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P45973	
<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> 25 kDa	

## Applications

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

## 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 MDS12 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). This antibody is a rabbit polyclonal antibody raised against a full-length human HP1A protein, and can react with the 28kd HP1A protein.

## 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:

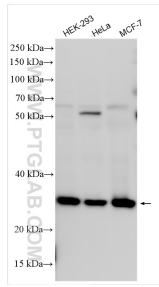
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## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 31109-1-AP (CBX5 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.