

For Research Use Only

CBX5 Recombinant antibody

Catalog Number: 83258-5-RR



Basic Information

Catalog Number: 83258-5-RR	GenBank Accession Number: BC006821	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 ug/ml by Nanodrop;	GeneID (NCBI): 23468	CloneNo.: 240145F11
Source: Rabbit	UNIPROT ID: P45973	Recommended Dilutions: WB 1:5000-1:50000 IHC 1:1000-1:4000 IF/ICC 1:200-1:800
Isotype: IgG	Full Name: chromobox homolog 5 (HP1 alpha homolog, Drosophila)	
Immunogen Catalog Number: AG34810	Calculated MW: 191 aa, 22 kDa	
	Observed MW: 22 kDa	

Applications

Tested Applications: WB, IHC, IF/ICC, FC (Intra), ELISA	Positive Controls:
Species Specificity: human, mouse, rat	WB : HeLa cells, HEK-293 cells, MCF-7 cells, Jurkat cells, A431 cells
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	IHC : human placenta tissue, mouse brain tissue, mouse stomach tissue, rat kidney tissue, rat stomach tissue
	IF/ICC : 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

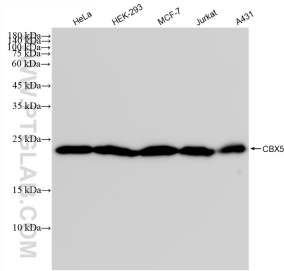
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

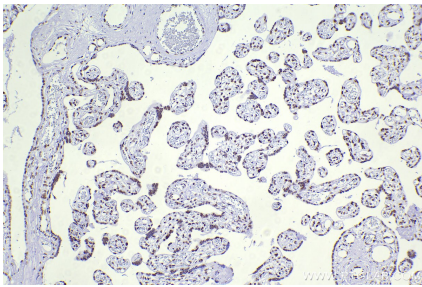
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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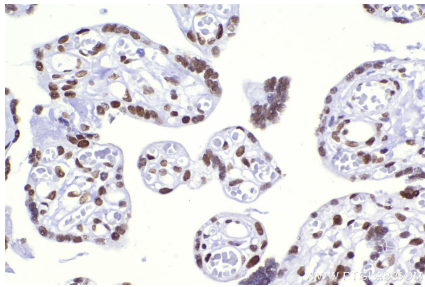
Selected Validation Data



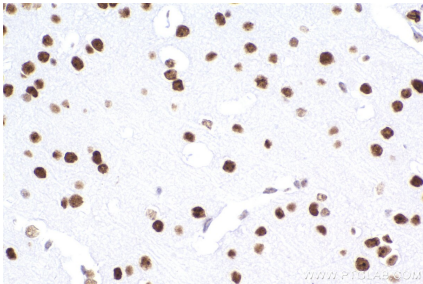
Various lysates were subjected to SDS PAGE followed by western blot with 83258-5-RR (CBX5 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



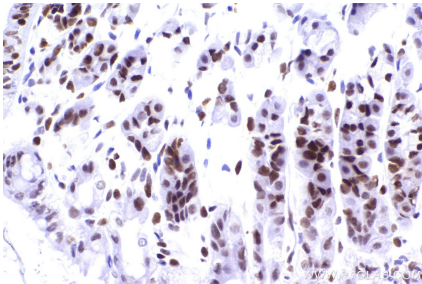
Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 83258-5-RR (CBX5 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



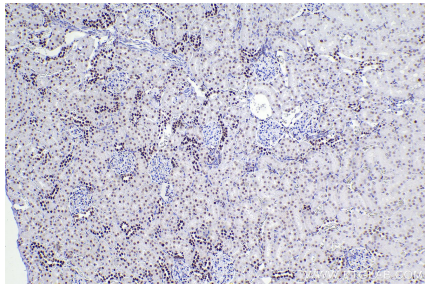
Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 83258-5-RR (CBX5 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



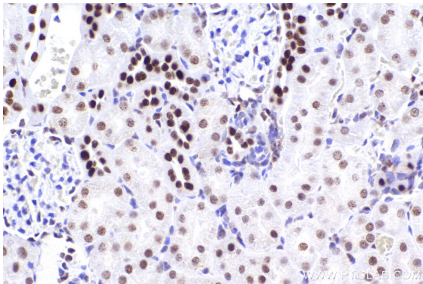
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 83258-5-RR (CBX5 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



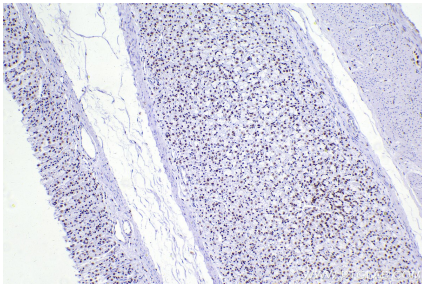
Immunohistochemical analysis of paraffin-embedded mouse stomach tissue slide using 83258-5-RR (CBX5 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



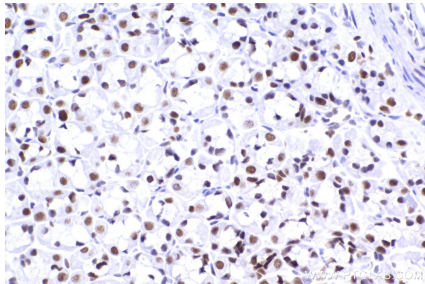
Immunohistochemical analysis of paraffin-embedded rat kidney tissue slide using 83258-5-RR (CBX5 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



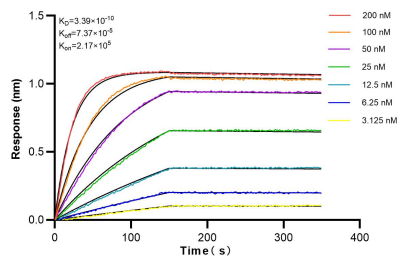
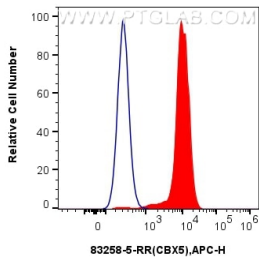
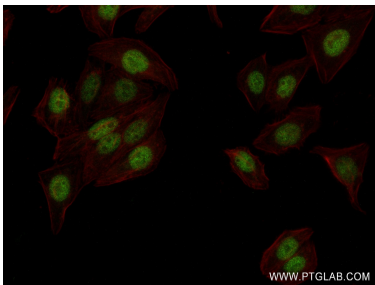
Immunohistochemical analysis of paraffin-embedded rat kidney tissue slide using 83258-5-RR (CBX5 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded rat stomach tissue slide using 83258-5-RR (CBX5 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded rat stomach tissue slide using 83258-5-RR (CBX5 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using CBX5 antibody (83258-5-RR, Clone: 240145F11) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).

1×10^6 SH-SY5Y cells were intracellularly stained with 0.25 μ g CBX5 Recombinant antibody (83258-5-RR, Clone:240145F11) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 μ g Isotype Control (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set.

Biolayer interferometry (BLI) kinetic assays of 83258-5-RR against Human CBX5 were performed. The affinity constant is 0.339 nM.