For Research Use Only

CBX5 Recombinant antibody

Catalog Number:83258-5-RR



Basic Information

Catalog Number: GenBank Accession Number: 83258-5-RR BC006821

 83258-5-RR
 BC006821

 Size:
 GeneID (NCBI):

 1000 μg/ml
 23468

 Source:
 UNIPROT ID:

 Rabbit
 P45973

 Isotype:
 Full Name:

IgG chromobox homolog 5 (HP1 alpha

Immunogen Catalog Number: homolog, Drosophila)
AG34810 Calculated MW:

191 aa, 22 kDa Observed MW: 22 kDa

Applications

Tested Applications: WB, IF/ICC, ELISA

Species Specificity:

Positive Controls:

WB: HeLa cells, HEK-293 cells, MCF-7 cells, Jurkat

Purification Method:

Protein A purification

Recommended Dilutions:

WB 1:5000-1:50000 IF 1:200-1:800

CloneNo.:

240145F11

cells, A431 cells

IF: 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 MIS12complex 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

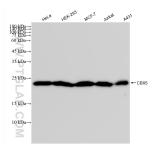
Storage:

Storage Buffer

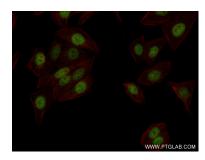
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

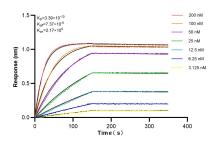
Selected Validation Data



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.



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).



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