

CBX5 Polyclonal Antibody

Catalog number: 11831-1-AP

Size: 37 µg/150 µl

Source: Rabbit

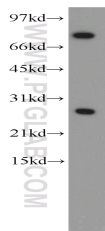
Isotype: IgG

Synonyms:

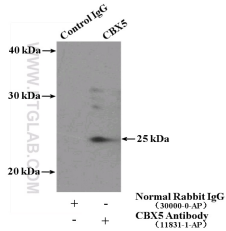
CBX5; Antigen p25, CBX5,

Chromobox protein homolog 5,

HP1, HP1 alpha, HP1A



HeLa cells were subjected to SDS PAGE followed by western blot with 11831-1-AP (CBX5 antibody) at dilution of 1:500



IP Result of anti-CBX5 (IP:11831-1-AP, 4µg; Detection:11831-1-AP 1:500) with HEK-293 cells lysate 1120µg.

Background

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

Applications

Tested applications:	ELISA, WB, IP
Species specificity:	Human, Mouse, Rat; other species not tested.
Calculated CBX5 MW:	191aa, 22 kDa
Observed CBX5 MW:	25-30 kDa
Positive WB detected in	HeLa cells, A431 cells, HEK-293 cells, human kidney tissue, K-562 cells, MCF7 cells, MCF-7 cells
Positive IP detected in	HEK-293 cells
Recommended dilution:	WB: 1:200-1:2000 IP: 1:200-1:2000

Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

Immunogen information

Immunogen:	Ag2403
GenBank accession number:	BC006821
Gene ID (NCBI):	23468
Full name:	Chromobox homolog 5 (HP1 alpha homolog, Drosophila)

Product information

Purification method:	Antigen affinity purification
Storage:	PBS with 0.1% sodium azide and 50% glycerol pH 7.3. Store at -20°C.