

Rabbit CBX5 Polyclonal Antibody | anti-CBX5 antibody

CBX5 Antibody

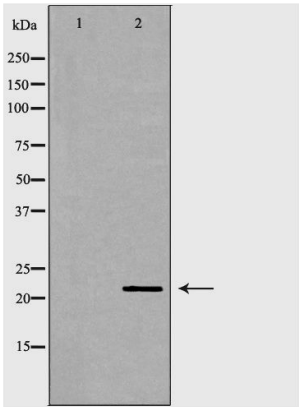
CATALOG # AAA326022	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS ELISA, Immunohistochemistry, Western Blot
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PRODUCT SYNONYMS

CBX5; Polyclonal Antibody; CBX5 Antibody; Antigen p25; CBX5_HUMAN; CG8409; Chromobox 5; Chromobox homolog 5 (HP1 alpha homolog; Drosophila); Chromobox homolog 5; Chromobox protein homolog 5; Epididymis luminal protein 25; HEL25; Heterochromatin protein 1 alpha; Heterochromatin protein 1; Heterochromatin protein 1 homolog alpha; HP1 alpha; HP1 alpha homolog; HP1; HP1A; HP1Hs alpha; Su(var)205; anti-CBX5 antibody

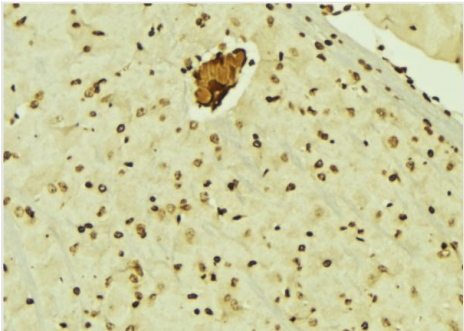
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	CBX5 antibody detects endogenous levels of total CBX5
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	191
Applicable Applications for anti-CBX5 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human CBX5
Subcellular Location	Nucleus. Chromosome. Chromosome > Centromere. Component of centromeric and pericentromeric heterochromatin. Associates with chromosomes during mitosis. Associates specifically with chromatin during metaphase and anaphase.
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Rabbit, Dog
Similarity	Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (92%), Dog (92%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



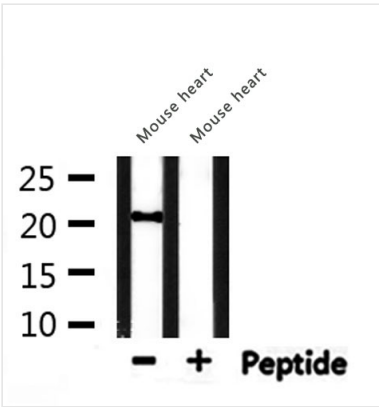
WB (Western Blot)

Western blot analysis of Hela whole cell lysates, using CBX5 Antibody. The lane on the left is treated with the antigen-specific peptide.



IHC (Immunohistochemistry)

AAA326022 at 1/100 staining Mouse brain tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)

Western blot analysis of extracts from mouse heart, using CBX5 Antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-CBX5 antibody	Description: Heterochromatin protein 1 (HP1) is a family of heterochromatic adaptor molecules involved in both gene silencing and higher order chromatin structure (1). All three HP1 family members (alpha, beta, and gamma) are primarily associated with centromeric heterochromatin; however, HP1beta and gamma also localize to euchromatic sites in the genome (2, 3). HP1 proteins are approximately 25 kDa in size and contain a conserved amino-terminal chromodomain, followed by a variable hinge region and a conserved carboxy-terminal chromoshadow domain. The chromodomain facilitates binding to histone H3 tri-methylated at Lys9, a histone mark closely associated with centromeric heterochromatin (4, 5). The variable hinge region binds both RNA and DNA in a sequence-independent manner (6). The chromoshadow domain mediates the dimerization of HP1 proteins, in addition to binding multiple proteins implicated in gene silencing and heterochromatin formation, including the SUV39H histone methyltransferase, the DNMT1 and DNMT3a DNA methyltransferases, and the p150 subunit of chromatin-assembly factor-1 (CAF1) (7-9). In addition to contributing to heterochromatin formation and propagation, HP1 and SUV39H are also found complexed with retinoblastoma (Rb) and E2F6 proteins, both of which function to repress euchromatic gene transcription in quiescent cells (10, 11). HP1 proteins are subject to multiple types of post-translational modifications, including phosphorylation, acetylation, methylation, ubiquitination, and sumoylation, suggesting multiple means of regulation (12-14). Function: 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). Can interact with lamin-B receptor (LBR). This interaction can contribute to the association of the heterochromatin with the inner nuclear membrane. Involved in the formation of functional kinetochore through interaction with MIS12 complex proteins. Subunit Structure: Interacts with KMT5B and KMT5C (By similarity). Interacts with HP1BP3 (PubMed:20042602). Interacts directly with ATRX, CHAF1A, LBR, NIPBL, SP100, STAM2 and TRIM28 via the chromoshadow domain (PubMed:15882967, PubMed:9169472). Can interact directly with CBX3 via the chromoshadow domain (PubMed:9169472). Interacts with histone H3 methylated at 'Lys-9' (PubMed:11242053, PubMed:21047797). Interacts with BAHD1, MIS12 and DSN1 (PubMed:15502821, PubMed:19666599). Interacts with POGZ; POGZ and PXVXL motif-containing proteins such as INCENP and TRIM28 compete for interaction with CBX5 (PubMed:20562864, PubMed:20850016, PubMed:21346195). Interacts with INCENP and TRIM24 (PubMed:11313457). Interacts with JC virus agnoprotein; this interaction induces the dissociation of CBX5 from LBR, resulting in destabilization of the nuclear envelope (PubMed:15864296). Interacts with CHAMP1 (PubMed:20850016). Interacts with ASXL1 (PubMed:19880879). Interacts with PRR14 (via N-terminus) (PubMed:25906157). Interacts with RRP1B (PubMed:19710015). Interacts with HNRNPU (via C-terminus); this interaction is, at least in part, RNA-dependent (PubMed:19617346). Post-translational Modifications: Phosphorylation of HP1 and LBR may be responsible for some of the alterations in chromatin organization and nuclear structure which occur at various times during the cell cycle (By similarity). Phosphorylated during interphase and possibly hyper-phosphorylated during mitosis. Ubiquitinated.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	188035908
NCBI GeneID	23468
NCBI Accession #	NP_001120793.1
NCBI GenBank Nucleotide #	NM_001127321.1
UniProt Accession #	P45973; B2R8T9
Molecular Weight	Observed: 22 kDa Predicted: 23 kDa
NCBI Official Full Name	chromobox protein homolog 5
NCBI Official Synonym Full Names	chromobox 5
NCBI Official Symbol	CBX5
NCBI Official Synonym Symbols	HP1; HP1A; HEL25
NCBI Protein Information	chromobox protein homolog 5
UniProt Protein Name	Chromobox protein homolog 5
UniProt Gene Name	CBX5

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/cbx5-antibody-immunohistochemistry-western-blot-elisa/326022>