

Product datasheet for **TA326926**

HP1 alpha (CBX5) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	WB 1:500 - 1:2000;IHC 1:50 - 1:200
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant protein of human CBX5
Formulation:	Store at -20C or -80C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	chromobox 5
Database Link:	NP_036249 Entrez Gene 12419 Mouse Entrez Gene 300266 Rat Entrez Gene 23468 Human P45973



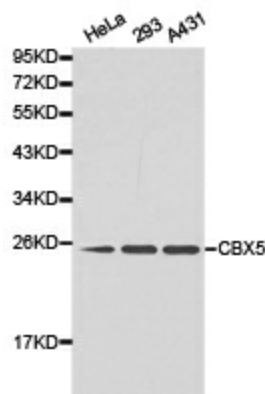
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Background:

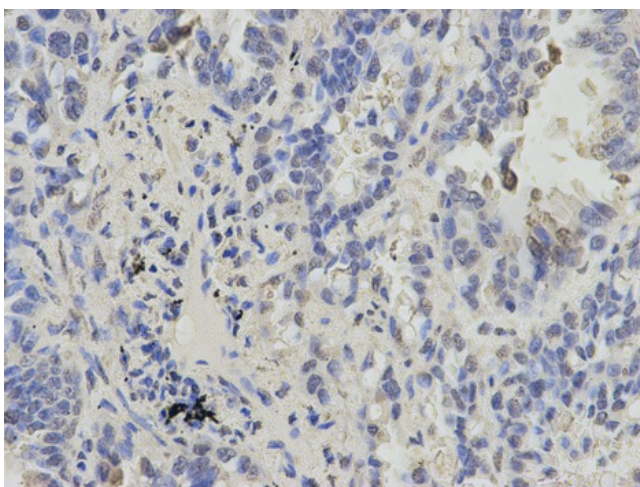
Heterochromatin protein 1 (HP1) is a family of heterochromatic adaptor molecules involved in both gene silencing and higher order chromatin structure. All three HP1 family members (α , β , and γ) are primarily associated with centromeric heterochromatin; however, HP1 β and γ also localize to euchromatic sites in the genome. 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. The variable hinge region binds both RNA and DNA in a sequence-independent manner. 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). 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. HP1 proteins are subject to multiple types of post-translational modifications, including phosphorylation, acetylation, methylation, ubiquitination, and sumoylation, suggesting multiple means of regulation.

Synonyms:

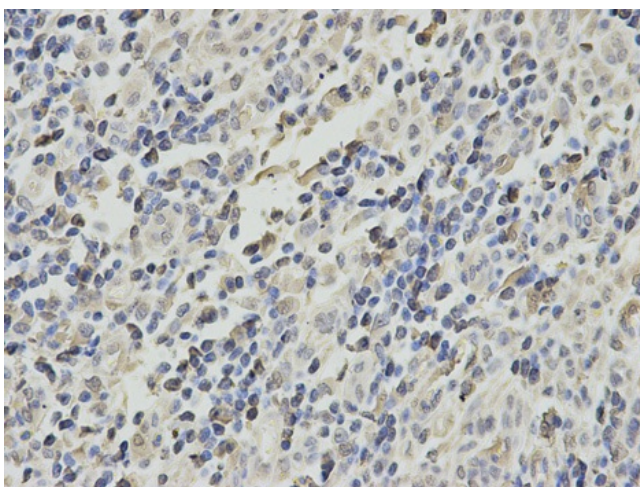
HEL25; HP1; HP1A

Product images:

Western blot analysis of extracts of various cell lines, using CBX5 antibody.



Immunohistochemistry of paraffin-embedded human lung cancer using CBX5 antibody at dilution of 1:200 (400x lens).



Immunohistochemistry of paraffin-embedded human stomach cancer using CBX5 antibody at dilution of 1:200 (400x lens).