

CBX5 Antibody

Catalog No: #32158

Package Size: #32158-1 50ul #32158-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

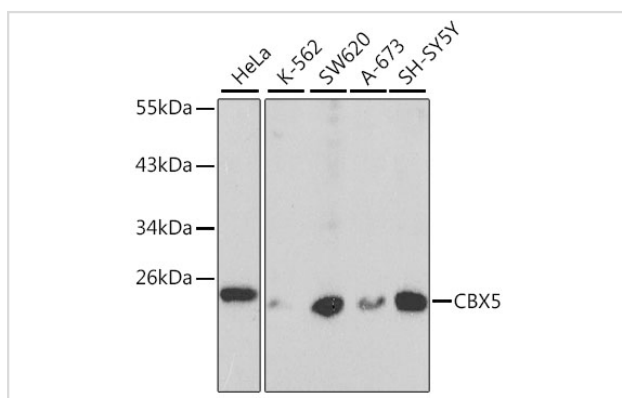
Description

Product Name	CBX5 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were purified by affinity purification using immunogen.
Applications	WB,IF
Species Reactivity	Human,Rat
Specificity	The antibody detects endogenous level of total CBX5 protein.
Immunogen Type	Recombinant Protein
Immunogen Description	Recombinant protein of human CBX5.
Target Name	CBX5
Other Names	CBX5; HP1; HP1A;
Accession No.	Swiss-Prot:P45973NCBI Gene ID:23468
Uniprot	P45973
GeneID	23468;
SDS-PAGE MW	22KD
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

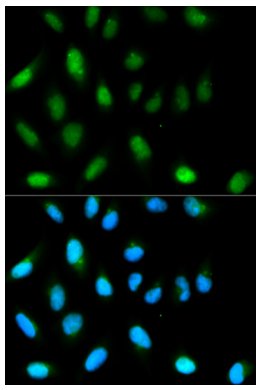
Application Details

WB □ 1:500 - 1:2000 IF □ 1:50 - 1:200 IP □ 1:50 - 1:200 ChIP □ 1:20 - 1:100

Images



Western blot analysis of extracts of various cell lines, using CBX5 at 1:1000 dilution.



Immunofluorescence analysis of HeLa cells using CBX5 .
Blue: DAPI for nuclear staining.

Background

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 (α , β , and γ) are primarily associated with centromeric heterochromatin; however, HP1 β and γ 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).

Note: This product is for in vitro research use only