# CBX3 Polyclonal Antibody

**ALTERNATE NAMES:** HECH, HP1-GAMMA, HP1Hs-gamma, HP1γ.

**CATALOG #:** 6147-100

**AMOUNT:** 100 µg

**HOST:** Rabbit

**ISOTYPE:** IgG

**IMMUNOGEN:** Fusion protein of human CBX3

**PURIFICATION:** Affinity purified

**MOLECULAR WEIGHT:** 21 kDa

**FORM:** Liquid

**FORMULATION:** 100 µg of antibody in 100 µl PBS containing 0.02% sodium azide, 50% glycerol, pH 7.3

**SPECIES REACTIVITY:** Human, Mouse, Rat

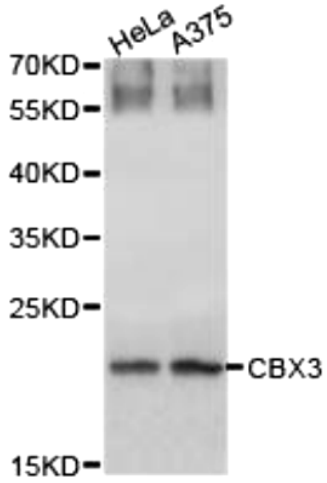
**STORAGE CONDITIONS:** Can be stored at -20°C or -80°C. Avoid repeated freeze/thaw cycles.

**DESCRIPTION**: 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, HP1β 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.

**SPECIFICITY:** Cross reacts with human, mouse and rat samples.

**APPLICATION:** Western blot: 1:500 – 1:2000, IHC: 1:50 – 1:100, IF: 1:20 – 1:50

**Note: This information is only intended as a guide. The optimal dilutions must be determined by the user**




WB of various cell extracts with CBX3 pAb.

**RELATED PRODUCTS:**

- CBX1 Polyclonal Antibody **(Cat. No. 6146-100)**
- CBX4 Polyclonal Antibody **(Cat. No. 5284-100)**
- CBX5 Polyclonal Antibody **(Cat. No. 6148-100)**

***FOR RESEARCH USE ONLY! Not to be used on humans.***