

# Goat Anti-CBX1 / HP1-Beta Antibody

Peptide-affinity purified goat antibody Catalog # AF1203a

## **Specification**

## Goat Anti-CBX1 / HP1-Beta Antibody - Product Information

**Application** WB, IHC, E **Primary Accession** P83916

Other Accession NP\_001120700, 10951, 12412 (mouse), 360609

Reactivity Human Predicted

Mouse, Rat, Dog

Goat **Polyclonal** 100ug/200ul

laG 21418

Concentration Isotype Calculated MW

Host

Clonality

## Goat Anti-CBX1 / HP1-Beta Antibody - Additional Information

## **Gene ID** 10951

### **Other Names**

Chromobox protein homolog 1, HP1Hsbeta, Heterochromatin protein 1 homolog beta, HP1 beta, Heterochromatin protein p25, M31, Modifier 1 protein, p25beta, CBX1, CBX

## **Dilution**

WB~~1:1000 IHC~~1:100~500

E~~N/A

#### **Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Goat Anti-CBX1 / HP1-Beta Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Goat Anti-CBX1 / HP1-Beta Antibody - Protein Information

#### Name CBX1



## **Synonyms** CBX

### **Function**

Component of heterochromatin. Recognizes and binds histone H3 tails methylated at 'Lys-9', leading to epigenetic repression. Interaction with lamin B receptor (LBR) can contribute to the association of the heterochromatin with the inner nuclear membrane.

#### **Cellular Location**

Nucleus Note=Unassociated with chromosomes during mitosis

#### **Tissue Location**

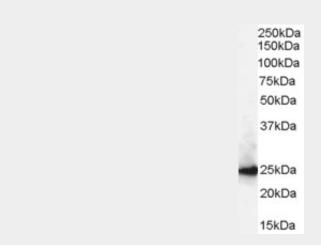
Expressed in all adult and embryonic tissues.

## Goat Anti-CBX1 / HP1-Beta Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

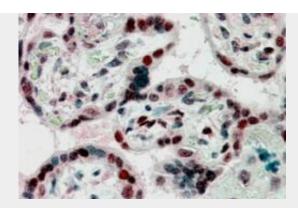
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## Goat Anti-CBX1 / HP1-Beta Antibody - Images



AF1203a (0.3  $\mu$ g/ml) staining of A431 lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.





AF1203a (2.5  $\mu$ g/ml) staining of paraffin embedded Human Placenta. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

## Goat Anti-CBX1 / HP1-Beta Antibody - Background

This gene encodes a highly conserved nonhistone protein, which is a member of the heterochromatin protein family . The protein is enriched in the heterochromatin and associated with centromeres. The protein has a single N-terminal chromodomain which can bind to histone proteins via methylated lysine residues, and a C-terminal chromo shadow-domain (CSD) which is responsible for the homodimerization and interaction with a number of chromatin-associated nonhistone proteins. The protein may play an important role in the epigenetic control of chromatin structure and gene expression. Several related pseudogenes are located on chromosomes 1, 3, and X. Multiple alternatively spliced variants, encoding the same protein, have been identified.

# Goat Anti-CBX1 / HP1-Beta Antibody - References

Lamin A rod domain mutants target heterochromatin protein 1alpha and beta for proteasomal degradation by activation of F-box protein, FBXW10. Chaturvedi P, et al. PLoS One, 2010 May 13. PMID 20498703.

Human heterochromatin protein 1 isoform HP1beta enhances androgen receptor activity and is implicated in prostate cancer growth. Shiota M, et al. Endocr Relat Cancer, 2010 Jun. PMID 20308360.

The core binding factor CBF negatively regulates skeletal muscle terminal differentiation. Philipot O, et al. PLoS One, 2010 Feb 25. PMID 20195544.

Defining the human deubiquitinating enzyme interaction landscape. Sowa ME, et al. Cell, 2009 Jul 23. PMID 19615732.

The histone methyltransferase SUV420H2 and Heterochromatin Proteins HP1 interact but show different dynamic behaviours. Souza PP, et al. BMC Cell Biol, 2009 Jun 1. PMID 19486527.