

**CBX3 antibody - middle region**  
**Rabbit Polyclonal Antibody**  
**Catalog # AI10144****Specification**

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**CBX3 antibody - middle region - Product Information**

Application	IHC, WB
Primary Accession	<a href="#">Q13185</a>
Other Accession	<a href="#">Q13185</a> , <a href="#">NP_057671</a> , <a href="#">NM_016587</a>
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Pig, Chicken, Dog, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	21 kDa KDa

**CBX3 antibody - middle region - Additional Information****Gene ID 11335**

Alias Symbol	HECH, HP1-GAMMA, HP1Hs-gamma
<b>Other Names</b>	

Chromobox protein homolog 3, HECH, Heterochromatin protein 1 homolog gamma, HP1 gamma, Modifier 2 protein, CBX3

**Target/Specificity**

At the nuclear envelope, the nuclear lamina and heterochromatin are adjacent to the inner nuclear membrane. CBX3 binds DNA and is a component of heterochromatin. CBX3 also can bind lamin B receptor, an integral membrane protein found in the inner nuclear membrane. The dual binding functions of CBX3 may explain the association of heterochromatin with the inner nuclear membrane. At the nuclear envelope, the nuclear lamina and heterochromatin are adjacent to the inner nuclear membrane. The protein encoded by this gene binds DNA and is a component of heterochromatin. This protein also can bind lamin B receptor, an integral membrane protein found in the inner nuclear membrane. The dual binding functions of the encoded protein may explain the association of heterochromatin with the inner nuclear membrane. Two transcript variants encoding the same protein but differing in the 5' UTR, have been found for this gene. At the nuclear envelope, the nuclear lamina and heterochromatin are adjacent to the inner nuclear membrane. The protein encoded by this gene binds DNA and is a component of heterochromatin. This protein also can bind lamin B receptor, an integral membrane protein found in the inner nuclear membrane. The dual binding functions of the encoded protein may explain the association of heterochromatin with the inner nuclear membrane. Two transcript variants encoding the same protein but differing in the 5' UTR, have been found for this gene.

**Format**

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

**Reconstitution & Storage**

Add 100 ul of distilled water. Final anti-CBX3 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at -20°C. Avoid repeat freeze-thaw cycles.

**Precautions**

CBX3 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

**CBX3 antibody - middle region - Protein Information****Name** CBX3**Function**

Seems to be involved in transcriptional silencing in heterochromatin-like complexes. Recognizes and binds histone H3 tails methylated at 'Lys-9', leading to epigenetic repression. May contribute to the association of the heterochromatin with the inner nuclear membrane through its interaction with lamin B receptor (LBR). Involved in the formation of functional kinetochore through interaction with MIS12 complex proteins. Contributes to the conversion of local chromatin to a heterochromatin-like repressive state through H3 'Lys-9' trimethylation, mediates the recruitment of the methyltransferases SUV39H1 and/or SUV39H2 by the PER complex to the E-box elements of the circadian target genes such as PER2 itself or PER1. Mediates the recruitment of NIPBL to sites of DNA damage at double-strand breaks (DSBs) (PubMed:<a href="http://www.uniprot.org/citations/28167679" target="\_blank">28167679</a>).

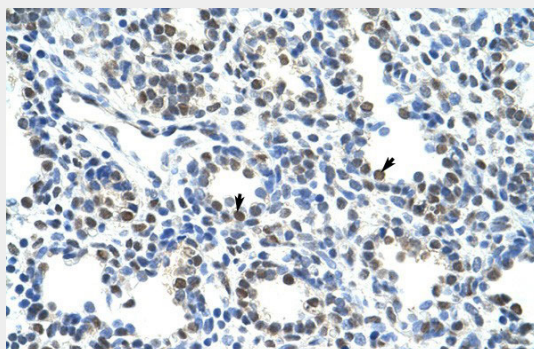
**Cellular Location**

Nucleus. Note=Associates with euchromatin and is largely excluded from constitutive heterochromatin. May be associated with microtubules and mitotic poles during mitosis (Potential).

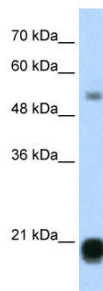
**CBX3 antibody - middle region - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**CBX3 antibody - middle region - Images**

CBX3 antibody - middle region (AI10144) in Human Lung cells using Immunohistochemistry  
Human Lung



CBX3 antibody - middle region (AI10144) in Human Jurkat cells using Western Blot

WB Suggested Anti-CBX3 Antibody Titration: 1.25µg/ml

Positive Control: Jurkat cell lysate

CBX3 is strongly supported by BioGPS gene expression data to be expressed in Human Jurkat cells

### **CBX3 antibody - middle region - Background**

This is a rabbit polyclonal antibody against CBX3. It was validated on Western Blot and immunohistochemistry by Abgent. At Abgent we manufacture rabbit polyclonal antibodies on a large scale (200-1000 products/month) of high throughput manner. Our antibodies are peptide based and protein family oriented. We usually provide antibodies covering each member of a whole protein family of your interest. We also use our best efforts to provide you antibodies recognize various epitopes of a target protein. For availability of antibody needed for your experiment, please inquire ([sales@abgent.com](mailto:sales@abgent.com)).