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CBX3 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI10144

Product Information

Application	WB, IHC
Primary Accession	Q13185
Other Accession	Q13185, NP_057671, NM_016587
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	20811

Additional Information

Gene ID	11335
Alias Symbol	HECH, HP1-GAMMA, HP1Hs-gamma
Other Names	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.

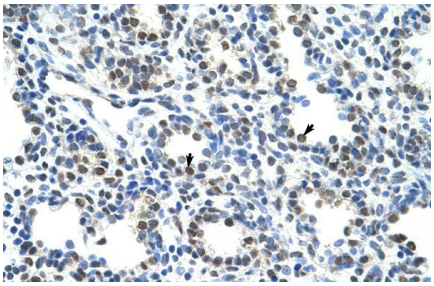
Protein Information

Name	CBX3
Function	Component of heterochromatin, which recognizes and binds histone H3 tails methylated at 'Lys-9', leading to epigenetic repression (PubMed:11242053). Also recognizes and binds histone H1.4 methylated at 'Lys-26' (H1.4K26me) (PubMed:16127177). Excluded from chromatin when histone H1.4 is Simultaneously methylated at Lys-26 (H1.4K26me) and phosphorylated at Ser-27 (H1.4S27Ph) (PubMed:16127177). Involved in the formation of functional kinetochore through interaction with MIS12 complex proteins (PubMed:15502821). 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 (By similarity). Mediates the recruitment of NIPBL to sites of DNA damage at double-strand breaks (DSBs) (PubMed:28167679).
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).

Background

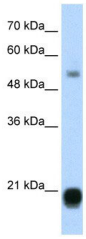
This is a rabbit polyclonal antibody against CBX3. It was validated on Western Blot and immunohistochemistry by Abgent. At Abgent we manufacture rabbit polyclonal antibodies on a large scale (200-1000 products/month) of high throughput manner. Our antibodies are peptide based and protein family oriented. 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).

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: 1.25 µg/ml
Positive Control: Jurkat cell lysate
CBX3 is strongly supported by BioGPS gene expression data to be expressed in Human Jurkat cells



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.