

CBX3 antibody - middle region

Rabbit Polyclonal Antibody Catalog # Al10144

Specification

CBX3 antibody - middle region - Product Information

Application WB, IHC
Primary Accession 013185

Other Accession <u>Q13185</u>, <u>NP 057671</u>, <u>NM 016587</u>

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
Other Names

HECH, HP1-GAMMA, HP1Hs-gamma

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: 28167679).

Cellular Location

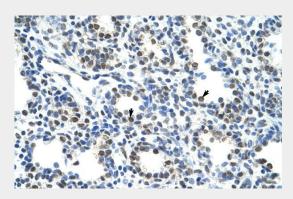
Nucleus. Note=Associates with euchromatin and is largely excluded from constitutive heterochromatin. May be associated with microtubules and mitotic poles during mitosis (Potential).

CBX3 antibody - middle region - Protocols

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

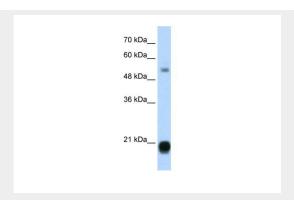
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CBX3 antibody - middle region - Images



CBX3 antibody - middle region (Al10144) in Human Lung cells using Immunohistochemistry Human Lung





CBX3 antibody - middle region (Al10144) 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).