

CBX3 / HP1 Gamma Antibody (Internal)

Goat Polyclonal Antibody Catalog # ALS12246

Specification

CBX3 / HP1 Gamma Antibody (Internal) - Product Information

Application IHC, WB Primary Accession 013185

Reactivity Human, Mouse, Rat, Rabbit, Hamster,

Monkey, Pig, Horse, Bovine, Dog

Host Goat
Clonality Polyclonal
Calculated MW 21kDa KDa

CBX3 / HP1 Gamma Antibody (Internal) - Additional Information

Gene ID 11335

Other Names

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

Target/Specificity

Human CBX3. No cross-reactivity expected with HP1-alpha and HP1-beta. NP_009207.2 and NP_057671.2 represent same protein.

Reconstitution & Storage

Store at -20°C. Minimize freezing and thawing.

Precautions

CBX3 / HP1 Gamma Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

CBX3 / HP1 Gamma Antibody (Internal) - 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

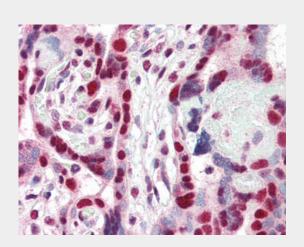
Nucleus. Note=Associates with euchromatin and is largely excluded from constitutive heterochromatin. May be associated with microtubules and mitotic poles during mitosis (Potential).

CBX3 / HP1 Gamma Antibody (Internal) - 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

CBX3 / HP1 Gamma Antibody (Internal) - Images



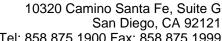
Anti-CBX3 antibody IHC of human placenta.



(0.3 ug/ml) Staining of A431 lysate (35 ug protein in RIPA buffer).

CBX3 / HP1 Gamma Antibody (Internal) - Background

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





Tel: 858.875.1900 Fax: 858.875.1999

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 mehtyltransferases SUV39H1 and/or SUV39H2 by the PER complex to the E-box elements of the circadian target genes such as PER2 itself or PER1.

CBX3 / HP1 Gamma Antibody (Internal) - References

Ye Q., et al.J. Biol. Chem. 271:14653-14656(1996). Ye Q., et al. Submitted (JAN-1997) to the EMBL/GenBank/DDBJ databases. Koike N., et al. FEBS Lett. 467:17-21(2000). Chen J.H., et al. Submitted (MAR-1999) to the EMBL/GenBank/DDBJ databases. Lubec G., et al. Submitted (MAR-2007) to UniProtKB.