10320 Camino Santa Fe, Suite G
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KD-Validated Anti-Chromobox Rabbit Monoclonal Antibody

Rabbit monoclonal antibody

Catalog # AGI1303

Specification

KD-Validated Anti-Chromobox Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	P45973
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 22 kDa; observed, 22 kDa KDa**
Gene Name	**CBX5**
Aliases	**CBX5; Chromobox ; HP1-ALPHA; HP1; Chromobox Homolog 5 (HP1 Alpha Homolog, Drosophila); Heterochromatin Protein 1 Homolog Alpha; Chromobox Protein Homolog 5; HP1Hs-Alpha; Antigen P25; HP1alpha; HP1A; Chromobox Homolog 5 (Drosophila HP1 Alpha); Heterochromatin Protein 1-Alpha; HP1 Alpha Homolog (Drosophila); Epididymis Luminal Protein 25; Chromobox Homolog 5; HP1 Alpha Homolog; HP1Hs Alpha; HP1 Alpha; HEL25**
Immunogen	**A synthesized peptide derived from human HP1 alpha**

KD-Validated Anti-Chromobox Rabbit Monoclonal Antibody - Additional Information

Gene ID	**23468**

Other Names

Chromobox protein homolog 5, Antigen p25, Heterochromatin protein 1 homolog alpha, HP1 alpha, CBX5, HP1A

KD-Validated Anti-Chromobox Rabbit Monoclonal Antibody - Protein Information

Name CBX5

Synonyms HP1A

Function

Component of heterochromatin that recognizes and binds histone H3 tails methylated at 'Lys-9' (H3K9me), leading to epigenetic repression. In contrast, it is excluded from chromatin when 'Tyr-41' of histone H3 is phosphorylated (H3Y41ph) (PubMed:19783980). May contribute to the association of heterochromatin with the inner nuclear membrane by interactions with the lamin-B receptor (LBR) (PubMed:19783980). Involved in the formation of kinetochore through interaction

with the MIS12 complex subunit NSL1 (PubMed:19783980, PubMed:20231385). Required for the formation of the inner centromere (PubMed:20231385).

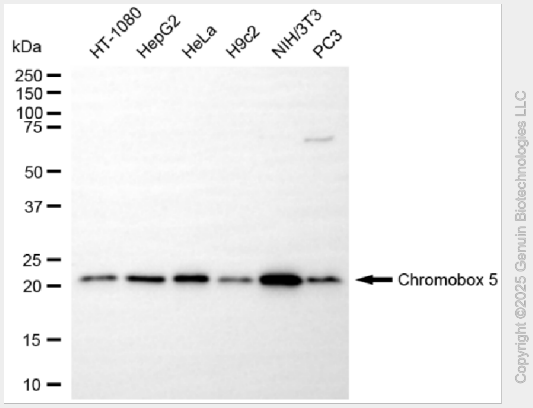
Cellular Location
Nucleus. Chromosome. Chromosome, centromere. Note=Colocalizes with HNRNPU in the nucleus (PubMed:19617346). Component of centromeric and pericentromeric heterochromatin. Associates with chromosomes during mitosis. Associates specifically with chromatin during metaphase and anaphase (PubMed:19617346). Localizes to sites of DNA damage (PubMed:28977666)

KD-Validated Anti-Chromobox Rabbit Monoclonal Antibody - 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

KD-Validated Anti-Chromobox Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-chromobox 5 antibody (Cat#AGI1303). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-chromobox 5 antibody (Cat#AGI1303, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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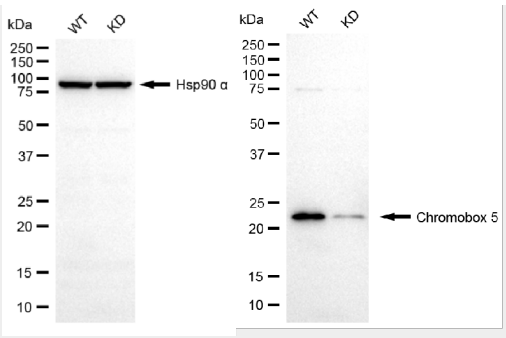
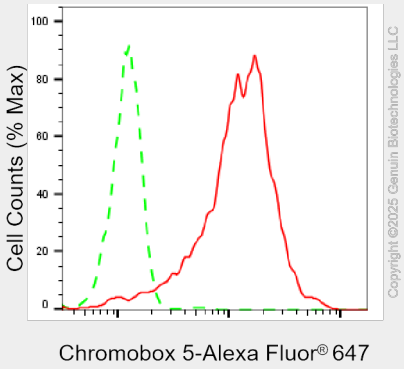
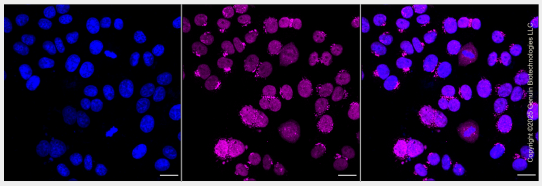


Western blotting analysis using anti-chromobox 5 antibody (Cat#AGI1303). Chromobox 5 expression in wild-type (WT) and chromobox 5 (CBX5) knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-chromobox 5 antibody (Cat#AGI1303, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Chromobox 5-Alexa Fluor® 647

Flow cytometric analysis of Chromobox 5 expression in HepG2 cells using anti-Chromobox 5 antibody (Cat#AGI1303, 1:2,000). Green, isotype control; red, Chromobox 5.



Immunocytochemical staining of HepG2 cells with anti-Chromobox 5 antibody (Cat#AGI1303, 1:1,000). Nuclei were stained blue with DAPI; Chromobox 5 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar, 20 µm.