
Product Name: KO-Validated Chromobox 3 Mouse Monoclonal Antibody**Catalog #: KVA00027**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Mouse
Application	WB,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG
Clonality	Mouse mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2,500; IHC-P 1:250-1:500
Molecular Weight	Calculated MW: 20.8kDa

Antigen Information

Gene Name	CBX3 CBX3; Chromobox 3; HP1Hs-Gamma; HP1gamma; Heterochromatin Protein 1 Homolog Gamma; Chromobox Protein Homolog 3; Modifier 2 Protein; HECH; Chromobox Homolog 3 (HP1 Gamma Homolog, Drosophila); Chromobox Homolog 3 (Drosophila HP1 Gamma); Heterochromatin Protein HP1 Gamma; HP1 Gamma Homolog (Drosophila); Heterochromatin-Like Protein 1; Chromobox Homolog 3; HP1 Gamma Homolog; HP1-GAMMA; HP1 Gamma
Alternative Names	
Gene ID	11335.0
SwissProt ID	Q13185
Immunogen	Recombinant protein of human HP1 gamma

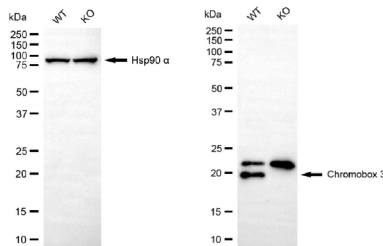
Background

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. This protein binds histone H3 tails methylated at Lys-9 sites. This protein is also recruited to sites of ultraviolet-induced DNA damage and double-strand breaks. Two transcript variants encoding the same protein but differing in the 5' UTR, have been found for this gene.[provided by RefSeq, Mar 2011]

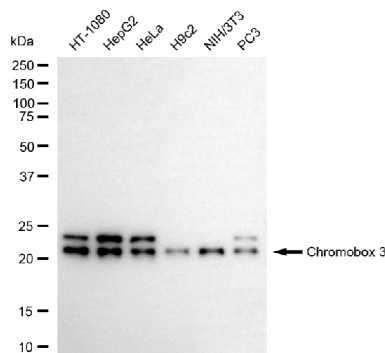
Research Area

Epigenetics and Nuclear Signaling

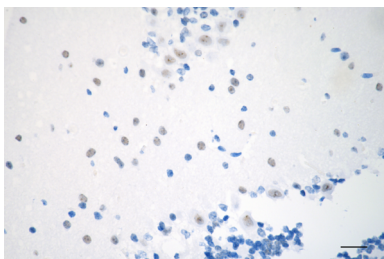
Image Data



Western blotting analysis using chromobox 3 antibody (KVA00027). Chromobox 3 expression in wild-type (WT) and chromobox 3 (CBX3) knockout (KO) 293T cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with chromobox 3 antibody (KVA00027, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Western blotting analysis using chromobox 3 antibody (KVA00027). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with chromobox 3 antibody (KVA00027, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (APS0631, 1:10,000) respectively.



Immunohistochemistry was performed on paraffin-embedded mouse brain using chromobox 3 antibody (KVA00027, 1:500). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.