
Product Name: KD-Validated Chromodomain Helicase DNA Binding Protein 3 Recombinant Rabbit Monoclonal Antibody

Catalog #: KVA00244

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit 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 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 226.6kDa

Antigen Information

Gene Name	CHD3
Alternative Names	CHD3; Chromodomain Helicase DNA Binding Protein 3; ZFH; Chromodomain-Helicase-DNA-Binding Protein 3; Mi-2 Autoantigen 240 KDa Protein; ATP-Dependent Helicase CHD3; Zinc Finger Helicase; Mi2-ALPHA; Mi-2a; CHD-3; HZFH; Zinc-Finger Helicase (Snf2-Like); EC 3.6.4.12; MI2-ALPHA; Mi2-Alpha; EC 3.6.1; SNIBCPS; MI-2A
Gene ID	1107.0
SwissProt ID	Q12873
Immunogen	A synthesized peptide derived from human CHD3

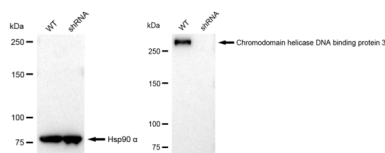
Background

This gene encodes a member of the CHD family of proteins which are characterized by the presence of chromo (chromatin organization modifier) domains and SNF2-related helicase/ATPase domains. This protein is one of the components of a histone deacetylase complex referred to as the Mi-2/NuRD complex which participates in the remodeling of chromatin by deacetylating histones. Chromatin remodeling is essential for many processes including transcription. Autoantibodies against this protein are found in a subset of patients with dermatomyositis. Three alternatively spliced transcripts encoding different isoforms have been described. [provided by RefSeq, Jul 2008]

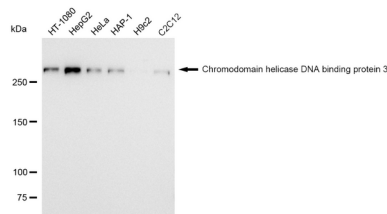
Research Area

Immunology, Epigenetics and Nuclear Signaling

Image Data

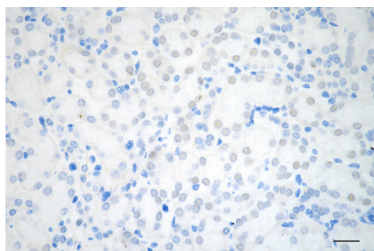


Western blotting analysis using

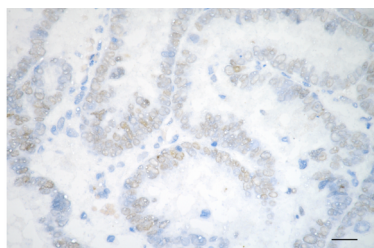


Chromodomain helicase DNA binding protein 3 antibody (KVA00244). Chromodomain helicase DNA binding protein 3 expression in wild type (WT) and chromodomain helicase DNA binding protein 3 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with Chromodomain helicase DNA binding protein 3 antibody (KVA00244, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.

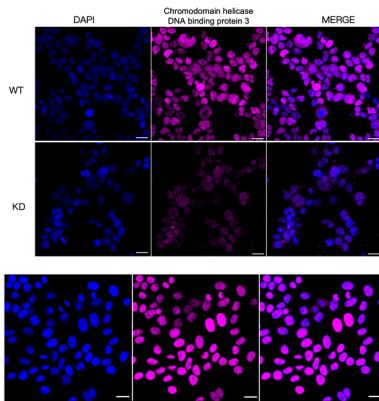
Western blotting analysis using Chromodomain helicase DNA binding protein 3 antibody (KVA00244). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Chromodomain helicase DNA binding protein 3 antibody (KVA00244, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



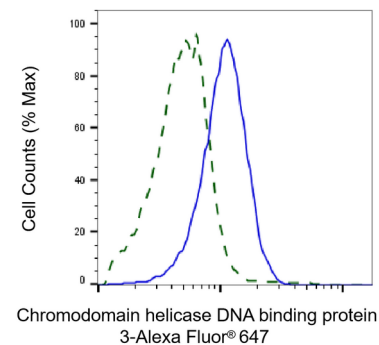
Immunohistochemistry was performed on paraffin-embedded mouse kidney using chromodomain helicase DNA binding protein 3 antibody (KVA00244, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunohistochemistry was performed on paraffin-embedded human ovarian carcinoma using chromodomain helicase DNA binding protein 3 antibody (KVA00244, 1:200). 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.

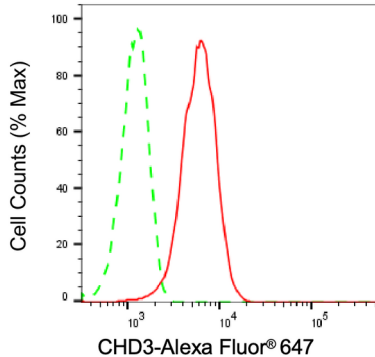


Immunocytochemical staining of HeLa cells using chromodomain helicase DNA binding protein 3 antibody (KVA00244, 1:1,000). Top panel: wild-type (WT); Bottom panel: chromodomain helicase DNA binding protein 3 shRNA knockdown (KD). Nuclei were stained blue with DAPI; was stained magenta with Alexa Fluor® 647. Scale bar, 20 μm. Permeabilization: Triton.



Immunocytochemical staining of HepG2 cells with Chromodomain helicase DNA binding protein 3 antibody (KVA00244, 1:1,000). Nuclei were stained blue with DAPI; Chromodomain helicase DNA binding protein 3 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.

Validation of Chromodomain helicase DNA binding protein 3 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with Chromodomain helicase DNA binding protein 3 antibody (KVA00244, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of CHD3 expression in HepG2 cells using CHD3 antibody (KVA00244, 1:2,000). Green, isotype control; red, CHD3.