abcam

Product datasheet

Anti-CHD8 antibody ab224830

3 Images

Overview

Product name	Anti-CHD8 antibody
Description	Rabbit polyclonal to CHD8
Host species	Rabbit
Tested applications	**Suitable for:** WB, IP, IHC-P
Species reactivity	**Reacts with:** Mouse, Human
Immunogen	Synthetic peptide within Human CHD8 aa 2252-2302. The exact sequence is proprietary. (NP_065971.2). Database link: **Q9HCK8-2**
Positive control	IHC-P: Human ovarian carcinoma tissue. WB: HeLa, HEK-293T, Jurkat, TCMK-1 and NIH/3T3 whole cell lysates. IP: HEK-293T whole cell lysate.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 6.8 Preservative: 0.09% Sodium azide Constituents: 0.1% BSA, Tris buffered saline
Purity	Immunogen affinity purified
Purification notes	ab224830 was affinity purified using an epitope specific to CHD8 immobilized on solid support.
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab224830 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/2000 - 1/10000. Predicted molecular weight: 290, 262 kDa.
IP		Use at 2-10 µg/mg of lysate.
IHC-P		1/100 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

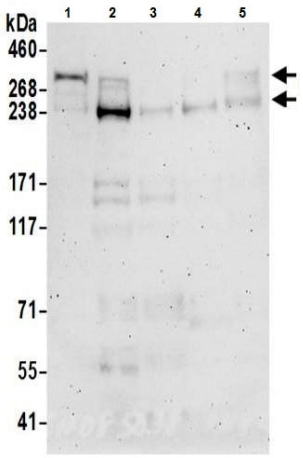
Function DNA helicase that acts as a chromatin remodeling factor and regulates transcription. Acts as a transcription repressor by remodeling chromatin structure and recruiting histone H1 to target genes. Suppresses p53/TP53-mediated apoptosis by recruiting histone H1 and preventing p53/TP53 transactivation activity. Acts as a negative regulator of Wnt signaling pathway by regulating beta-catenin (CTNNB1) activity. Negatively regulates CTNNB1-targeted gene expression by being recruited specifically to the promoter regions of several CTNNB1 responsive genes. Involved in both enhancer blocking and epigenetic remodeling at chromatin boundary via its interaction with CTCF. Acts as a suppressor of STAT3 activity by suppressing the LIF-induced STAT3 transcriptional activity. Also acts as a transcription activator via its interaction with ZNF143 by participating to efficient U6 RNA polymerase III transcription.

Sequence similarities Belongs to the SNF2/RAD54 helicase family. CHD8 subfamily.
Contains 2 chromo domains.
Contains 1 helicase ATP-binding domain.
Contains 1 helicase C-terminal domain.

Post-translational modifications Sumoylated.

Cellular localization Nucleus. Localizes to the promoter regions of several CTNNB1-responsive genes. Also present at known CTCF target sites.

Images



Western blot - Anti-CHD8 antibody (ab224830)

All lanes : Anti-CHD8 antibody (ab224830) at 0.1 µg/ml

Lane 1 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate
Lane 2 : HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate
Lane 3 : Jurkat (human T cell leukemia cell line from peripheral blood) whole cell lysate
Lane 4 : TCMK-1 (mouse kidney epithelial cell line) whole cell lysate
Lane 5 : NIH/3T3 (mouse embryo fibroblast cell line) whole cell lysate

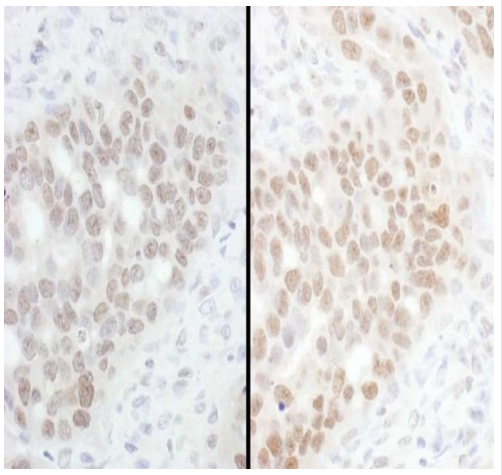
Lysates/proteins at 50 µg per lane.

Developed using the ECL technique.

Predicted band size: 290, 262 kDa

Exposure time: 3 minutes

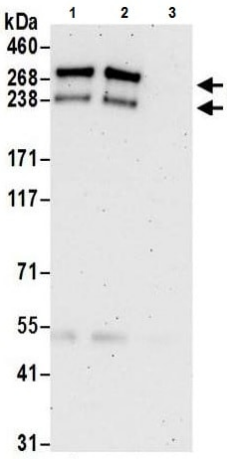
Lysates prepared using NETN buffer.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CHD8 antibody (ab224830)

Formalin-fixed, paraffin-embedded human ovarian carcinoma tissue stained for CHD8 using ab224830 at 1/200 dilution in immunohistochemical analysis. Detection: DAB staining.

The two panels show staining with different lots.



Immunoprecipitation - Anti-CHD8 antibody (ab224830)

CHD8 was immunoprecipitated from HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate prepared using NETN buffer with ab224830 at 6 µg per reaction. Western blot was performed from the immunoprecipitate using ab224830 at 0.1 µg/ml.

Lane 1: ab224830 IP in HEK-293T whole cell lysate.

Lane 2: ab224830 IP in HEK-293T whole cell lysate.

Lane 2: Control IgG IP in HeLa whole cell lysate.

Detection: Chemiluminescence with exposure time of 3 minutes.

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