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Anti-CHD1L Antibody

Catalog # AP51085

Product Information

Application	WB, IF/IC
Primary Accession	Q86WJ1
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	101000

Additional Information

Gene ID	9557
Other Names	ALC1; Chromodomain-helicase-DNA-binding protein 1-like; Amplified in liver cancer protein 1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CHD1L. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

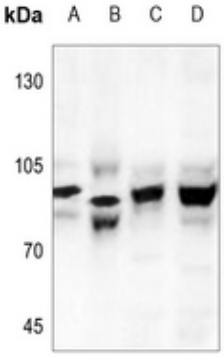
Name	CHD1L {ECO:0000303|PubMed:34210977, ECO:0000312|HGNC:HGNC:1916}
Function	ATP-dependent chromatin remodeler that mediates chromatin- remodeling following DNA damage (PubMed:19661379, PubMed:29220652, PubMed:29220653, PubMed:33357431, PubMed:34210977, PubMed:34486521, PubMed:34874266). Recruited to DNA damage sites through interaction with poly-ADP-ribose: specifically recognizes and binds histones that are poly-ADP-ribosylated on serine residues in response to DNA damage (PubMed:19661379, PubMed:29220652, PubMed:29220653, PubMed:34486521, PubMed:34874266). Poly-ADP-ribose-binding activates the ATP-dependent chromatin remodeler activity, thereby regulating chromatin during DNA repair (PubMed:19661379, PubMed:29220652, PubMed:29220653, PubMed:34486521, PubMed:34874266). Catalyzes nucleosome sliding away from DNA breaks in an ATP-dependent manner (PubMed:19661379, PubMed:29220652, PubMed:29220653). Chromatin remodeling activity promotes PARP2 removal from chromatin (PubMed:33275888).

Cellular Location	Nucleus. Chromosome Note=Localizes at sites of DNA damage; recruited by histones H2B and H3 poly-ADP-ribosylated on 'Ser-6' and 'Ser-10', respectively (H2BS6ADPr and H3S10ADPr) by PARP1 or PARP2.
Tissue Location	Frequently overexpressed in hepatomacellular carcinomas.

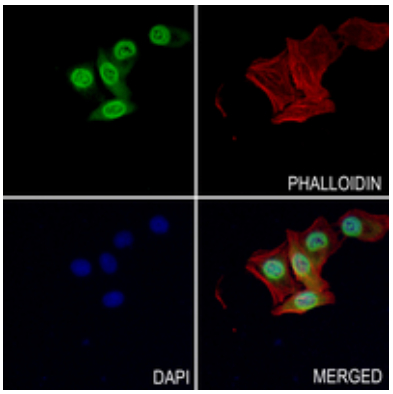
References

Ma N.-F.,et al.Hepatology 47:503-510(2008).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Gregory S.G.,et al.Nature 441:315-321(2006).
Totoki Y.,et al.Submitted (APR-2005) to the EMBL/GenBank/DDBJ databases.

Images



Western blot analysis of CHD1L expression in HepG2 (A), HEK293T (B), MEF (C), PC12 (D) whole cell lysates. (Predicted band size: 101 kD; Observed band size: 101 kD)



Immunofluorescent analysis of CHD1L staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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