

CHD1L Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51085

Product Information

Application	WB
Primary Accession	<u>Q86WJ1</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	101000

Additional Information

Gene ID	9557
Other Names	Chromodomain-helicase-DNA-binding protein 1-like, Amplified in liver cancer protein 1, CHD1L, ALC1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CHD1L. The exact sequence is proprietary.
Dilution	WB~~1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
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.

Background

DNA helicase which plays a role in chromatin-remodeling following DNA damage. Targeted to sites of DNA damage through interaction with poly(ADP-ribose) and functions to regulate chromatin during DNA repair. Able to catalyze nucleosome sliding in an ATP-dependent manner. Helicase activity is strongly stimulated upon poly(ADP-ribose)-binding.

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.

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