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## CHD1L (E1I8C) Rabbit mAb



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Applications: WB, IP	Reactivity:	Sensitivity: Endogenous	<b>MW (kDa):</b> 110	Source/Isotype: Rabbit IgG	UniProt ID: #Q86WJ1	Entrez-Gene Id 9557
Product Usage Information	Application			Dilution		
	Western Blotting			1:1000		
	lmı	Immunoprecipitation			1:100	
Storage		Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 $\mu$ g/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at $-20$ °C. Do not aliquot the antibody.				
Specificity / Sensi	tivity CHI	CHD1L (E1I8C) Rabbit mAb recognizes endogenous levels of total CHD1L protein.				
Source / Purification		Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly231 of human CHD1L protein.				

**Background** 

Chromodomain-helicase-DNA-binding domain 1 like (CHD1L) is a DNA helicase and member of the SNF2 subfamily of ATP dependent chromatin remodeling enzymes (1). Unlike other CHD chromatin remodeling proteins, CHD1L lacks a methylated histone binding chromodomain but does contain a macro domain that binds poly-ADP ribosylated (PARylated) targets (1,2). Following genotoxic stress, CHD1L interacts with PARylated PARP1 and is recruited to sites of DNA damage to facilitate DNA repair (3,4). The CHD1L protein is often over expressed in metastatic hepatocellular carcinoma (HCC) and the corresponding *CHD1L* gene is located in a region that is frequently amplified in cases of HCC (5-7). Research studies indicate that CHD1L over expression may lead to over relaxation of chromatin and exposing the underlying DNA to genotoxic stress (1). CHD1L can regulate expression of genes that promote tumor cell proliferation, migration and metastasis, providing another mechanism where CHD1L may promote hepatocellular carcinoma progression and metastasis (6,8). Additional research studies suggest that over expression of CHD1L may be involved in the progression of bladder, colon and ovary cancer (9-11).

## **Background References**

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- 2. Karras, G.I. et al. (2005) EMBO J 24, 1911-20.
- 3. Gottschalk, A.J. et al. (2009) Proc Natl Acad Sci U S A 106, 13770-4.
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- 5. Ma, N.F. et al. (2008) Hepatology 47, 503-10.
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- 7. Chen, L. et al. (2009) Hepatology 50, 122-9.
- 8. Chen, M. et al. (2009) PLoS One 4, e6727.
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**Species Reactivity** Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry

milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key WB: Western Blotting IP: Immunoprecipitation

Cross-Reactivity Key H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster

X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse

GP: Guinea Pig Rab: rabbit All: all species expected

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