Revision 1

Store at -20C

#13460

CHD1L (E1I8C) Rabbit mAb

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H	Endogenous	110	Rabbit IgG	#Q86WJ1	9557

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:100

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

Specificity/Sensitivity

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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4. Ahel, D. et al. (2009) *Science* 325, 1240-3.
5. Ma, N.F. et al. (2008) *Hepatology* 47, 503-10.
6. Chen, L. et al. (2010) *J Clin Invest* 120, 1178-91.
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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

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human

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